

420-EMD-001

Release 7 Implementation Earth Science Data Model for the EMD Project

Technical Paper

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RESPONSIBLE ENGINEER

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Abstract

This technical paper contains the Earth Science Data (Conceptual) Model, which organizes and describes the metadata, for the Earth Observation System Data and Information Core System (ECS), for Release 7 Implementation Design. The Data Model includes diagrams that graphically illustrate the relationships between classes, and the attribute specifications. The relationships and information among data objects are described as they are understood and utilized within the Earth Science Community. In addition, the Data Model includes diagrams that graphically illustrate the relationships of classes, the attributes contained within the classes, the characteristics of the relationships between classes, and the attribute specifications. The diagrams and specifications which were previously products of the Interactive Development Environment (IDE)/Object Modeling Technique (OMT) Computer Aided Software Engineering (CASE) Tool, have changed to products of Power Designer, an Entity Relationship Diagram (ERD) representation. The specifications are defined in alphabetical order for cross-reference to the diagrams. This document has incorporated updated material from addendums/erratas from B.0 Implementation Data Model dated May 1997 through Release 6A Data Model dated May 2002.

The relationships and information among the data objects are described as they are understood and used within the Earth Science Community. In conclusion, this technical paper continues to remain under the control of the ECS Configuration Control Board.

Keywords: Attributes, Conceptual, CSDT, Database, Design, Dictionary, Domains, Specifications, ESDT, Files, Valid

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1. Introduction

1.1 Purpose

The purpose of this technical document is to provide modifications to the Release 7 Earth Science Data Model for the EMD Project (420-EMD-001) which illustrate, specify, and communicate the design of the EMD earth science metadata. This technical paper represents the Release 7 Implementation design of the EMD earth science data model, useful to designers, developers, scientists and managers. The earth science metadata model represented in this document is a practical means of assuring the consistency of data requirements across subsystems, and supporting the data standardization necessary for total system interoperability within a heterogeneous open systems environment.

1.2 Organization

This paper is organized in accordance with ESDIS standard format. A description of the document content follows:

- Section 2 contains the Release 7 Implementation Earth Science object model, class descriptions, attribute specifications and Valid.

If you have any questions regarding technical information contained within this Paper should be addressed to the following EMD contacts:

- Milton Stevens, Database Engineer, (301) 925-0423, ddm@eos.hitc.com
- Jon Pals, Science Office, (301) 925- 0348, metadata@eos.hitc.com

Questions concerning distribution or control of this document should be addressed to:

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2. Release 7 Implementation Earth Science Data Model

2.1 Release 7 Implementation Earth Science Data Model: ERD Diagrams

The Release 7 Implementation Earth Science Data Model consists primarily of metadata that can be mapped to the upper layers of the data pyramid. This metadata describes the details of large amounts of data that are generally associated with the remaining levels of the data pyramid and archived in various media and format. Data other than metadata are pointed to in the diagrams (e.g., Granules for Levels 0 through 4, Documents, Algorithms, Production History, and Statistics.)

Historical primary implementation modifications since the Release 2 Earth Science Data Model for the ECS Project (420-TP-015-003) to Release 7 are listed below:

- Added new Valids and/or Keywords from MODIS
- Added new Valids and/or Keywords from AMSR, Landsat-7 and Aura
- Added new Valids and/or Keywords from HIRDLS, MLS, OMI and TES on the Aura satellite
- Added new Valids and/or Keywords from GLAS



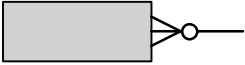





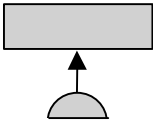
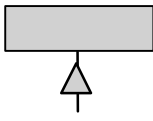
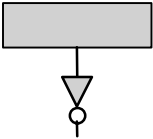
The Earth Science Data Model is very large and not suited to be displayed legibly in a single diagram (global diagram – Figure 2-2); therefore, it is logically segmented into modules for the purpose of readability. The eight modules, when concatenated, represent the entire Earth Science Data Model.

Offpage connectors are included in the global diagram (Figure 2-2), as required, to allow for relationships to classes within various other modules. Offpage connectors are not, however, included in the diagrams of the submodels (Figures 2-3 through 2-10). Offpage connectors are also used to relate the data that involve classes of data that are not in the Earth Science Data Model. Those attributes having the term “pointer” included in the attribute name indicate that a data object is external to the metadata and a link to the data object must exist.

In this section the various modules are represented by Entity-Relationship Diagrams (ERD) diagrams (Figures 2-2 through 2-10), generated from the Power Designer tool. The specifications for the attributes within each class are found in Section 2.1.1.

An explanation of the differences in representation between ERD (Power Designer) and OMT is presented in Figure 2-1.

ERD Mapping (Power Designer to OMT)

Multiplicity of Associations	Power Designer	OMT
Exactly One		
Many (zero or more)		
Optional (zero or one)		
One or More		
Inheritance		
Dependence		

Terminology Mapping

Power Designer

OMT

Entity

Class

Data Item

Attribute

Entity Relationship Design (ERD)

Object-Modeling Technique (OMT)

Relationship

Association

Inheritance

Inheritance

Domain (list of valids)

Domain Value

Figure 2-1. ERD Mapping

Available in separate file.

Figure 2-2. Release 7 Implementation Global Model

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Table 2-1. Attribute DataType Definitions

Conceptual Data Type	Code in DEF File	What It Stores	Translation Example For SQL Anywhere
Character	A	Character strings of fixed length	char
Variable Characters	VA	Character strings of variable length	varchar
Boolean	BL	Two opposing values (true/false; yes/no; 1/0)	numeric(1)
Text	TXT	Character strings of variable length	long varchar
Short Integer	SI	16-bit integer	smallint
Integer	I	32-bit integer	integer
Number	N	Number with a fixed decimal point	numeric
Float	F	32-bit floating decimal number	float
Short Float	SF	Less than 32-bit floating decimal numbers	real
Long Float	LF	64-bit floating decimal numbers	double
Date	D	Day, month, and year	date
Time	T	Hour, minute, and second	time
Date & Time	DT	Date and time	timestamp

Model: RELEASE 6A
Package:
Diagram: REL6A DataOriginator

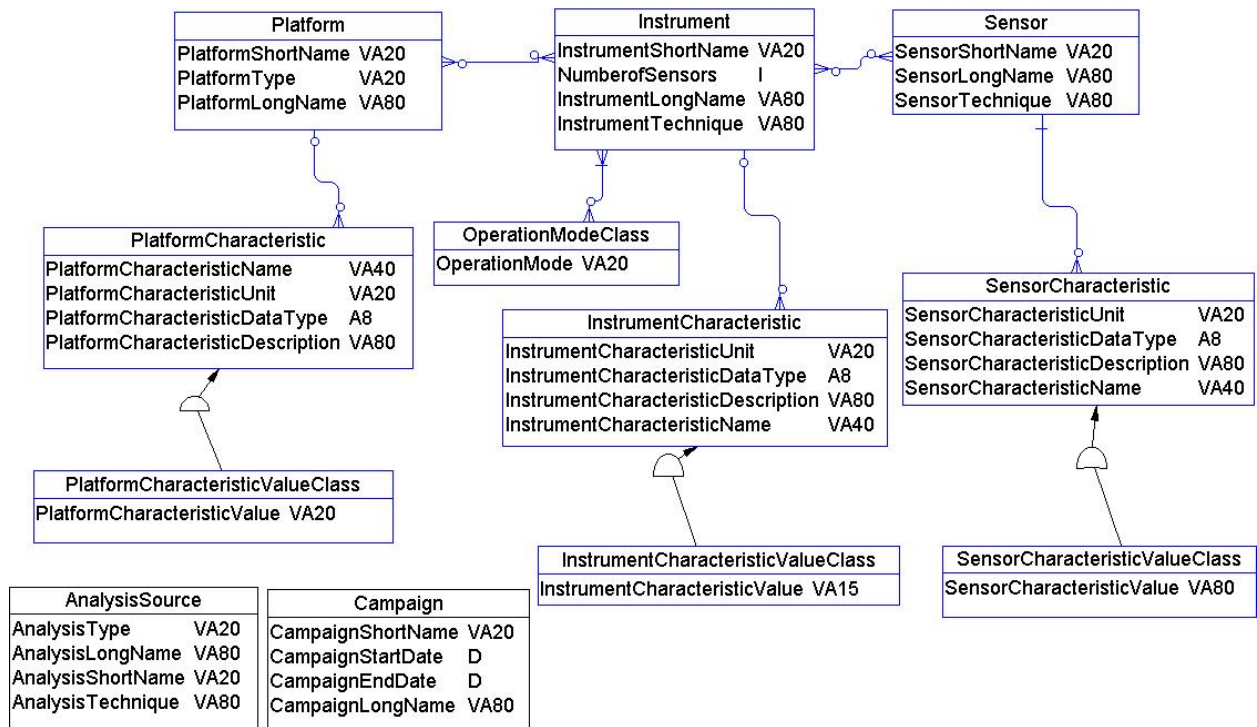


Figure 2-3. Data Originator

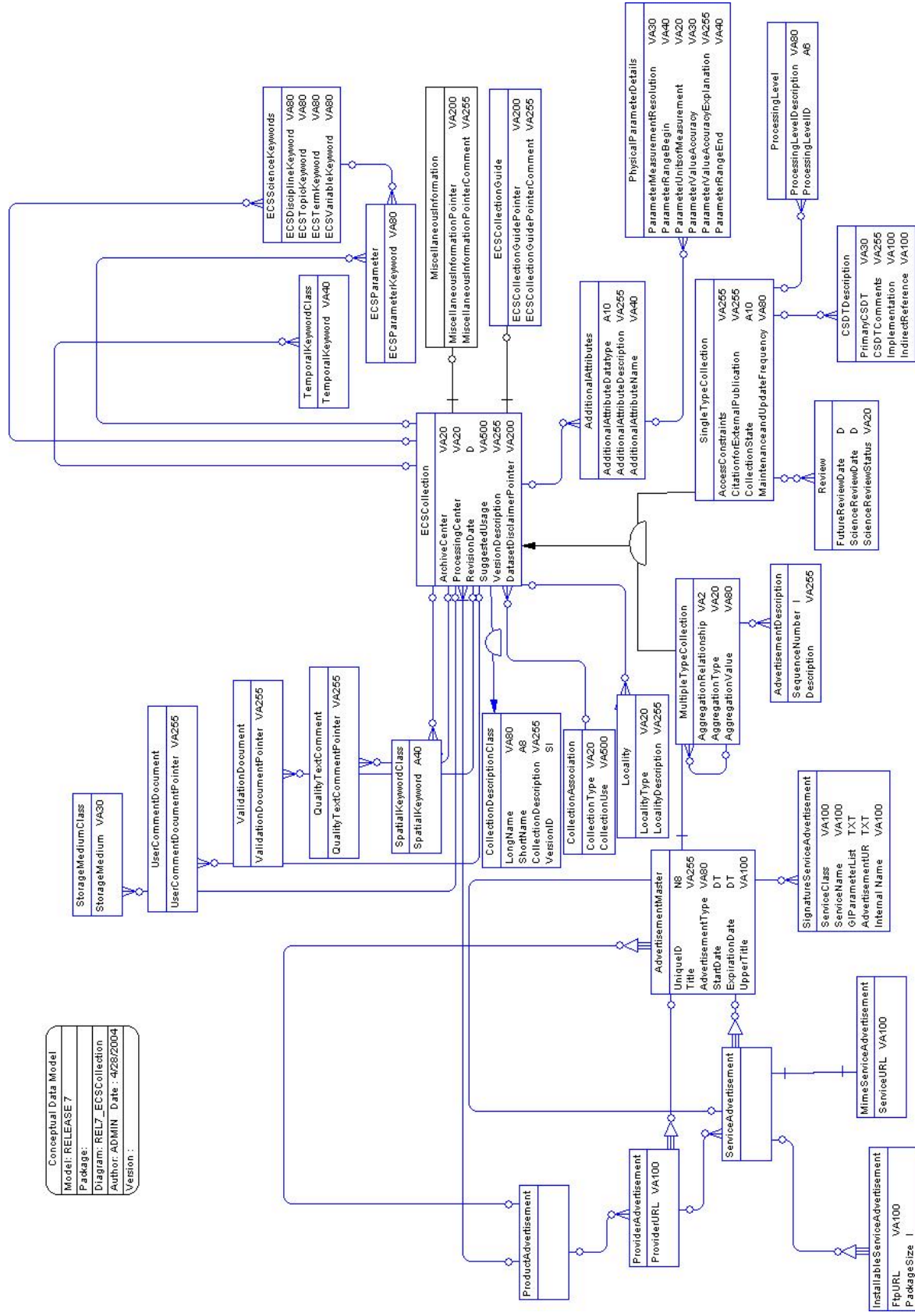


Figure 2-4. ECSCollection

Conceptual Data Model	
Model:	RELEASE 7
Package:	
Diagram:	REL7_ECSDDataGranule
Author:	ADMIN
Date:	4/28/2004
Version:	

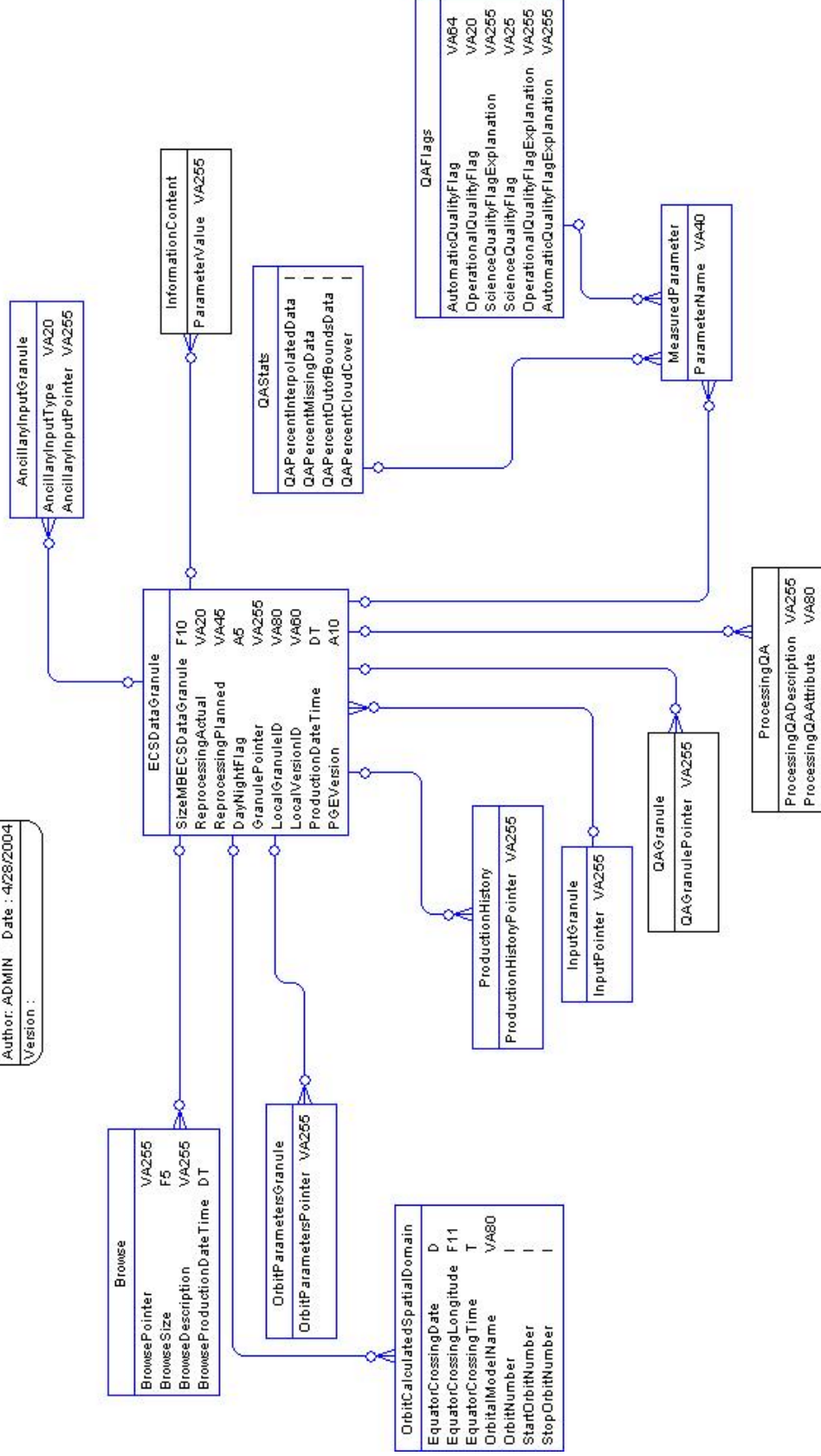


Figure 2-5. ECSDDataGranule

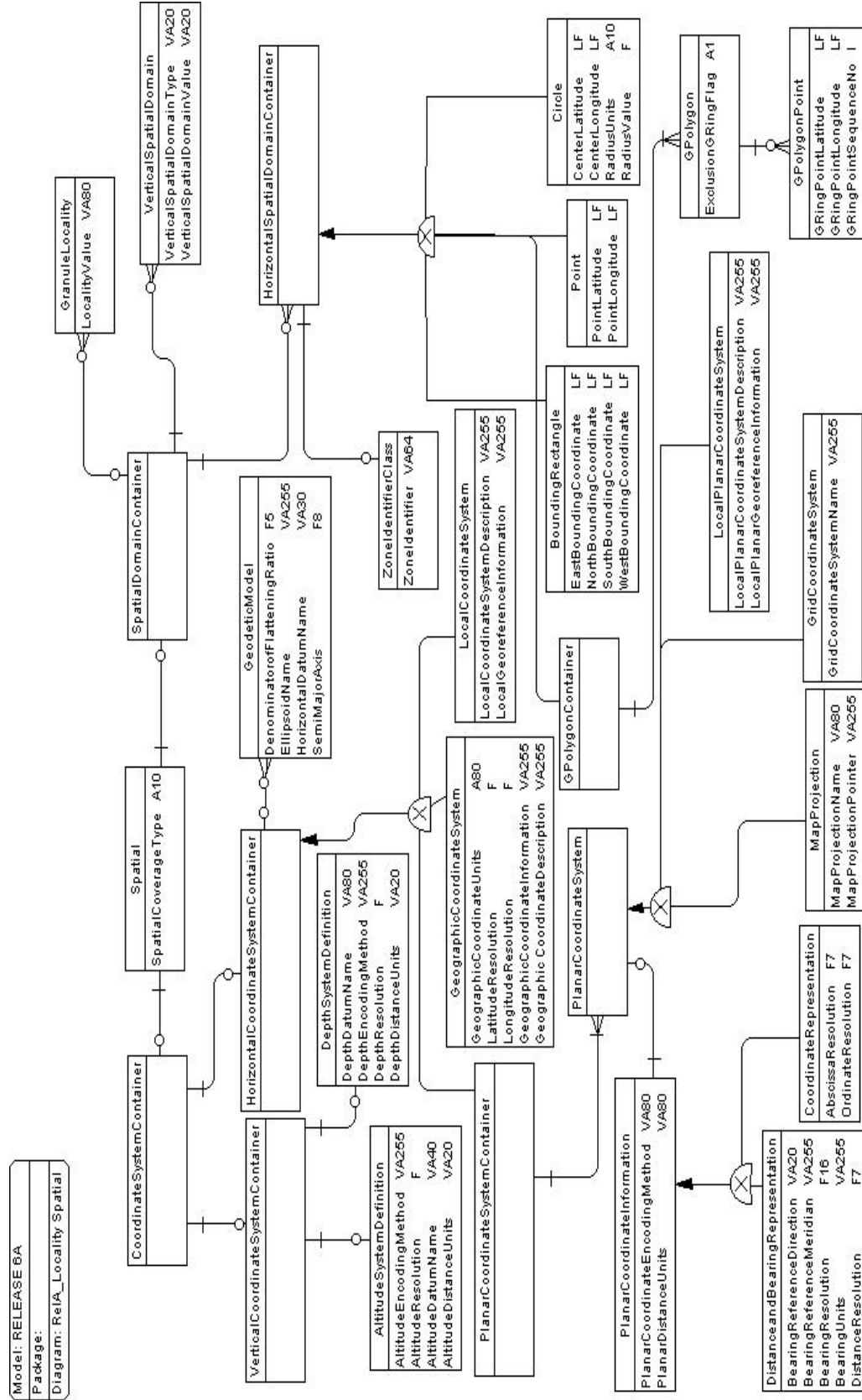


Figure 2-6. LocalitySpatial

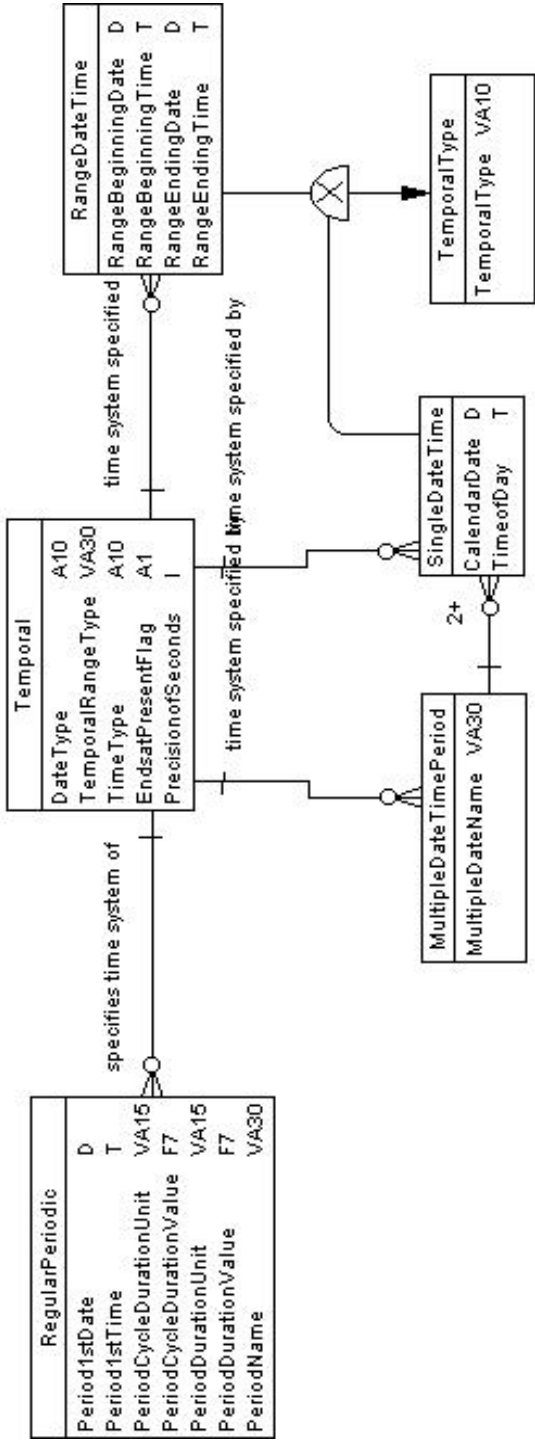


Figure 2-7. LocalityTemporal

Conceptual Data Model	
Model:	RELEASE 7
Package:	
Diagram:	REL7_Contact
Author:	ADMIN
Date:	4/28/2004
Version:	

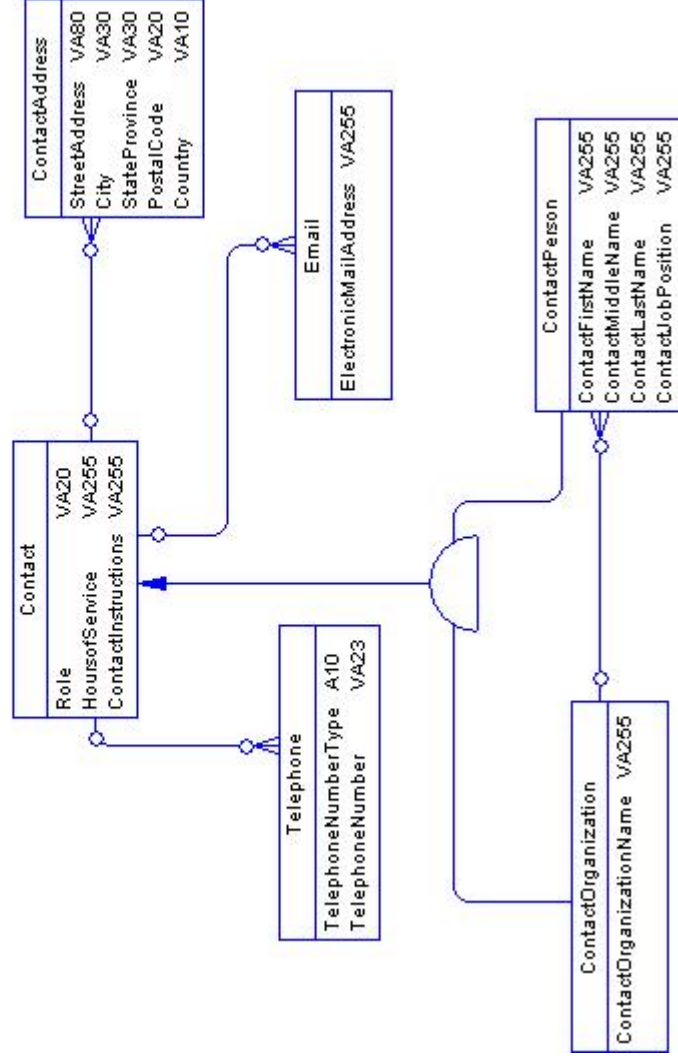
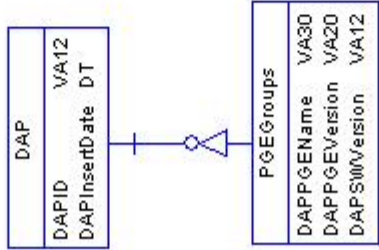


Figure 2-8. Contact

Conceptual Data Model	
Model: RELEASE 7	
Package:	
Diagram: REL7_DeliveredAlgorithmPackage	
Author: ADMIN	Date : 4/28/2004
Version :	



SUBMODEL: Delivered Algorithm Package

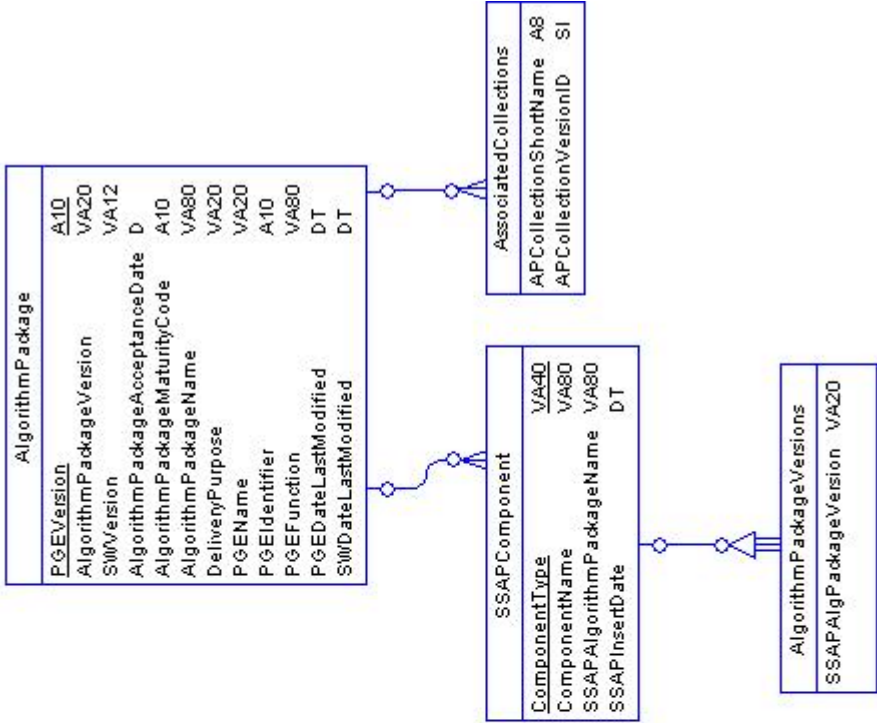


Figure 2-9. DeliveredAlgorithmPackage

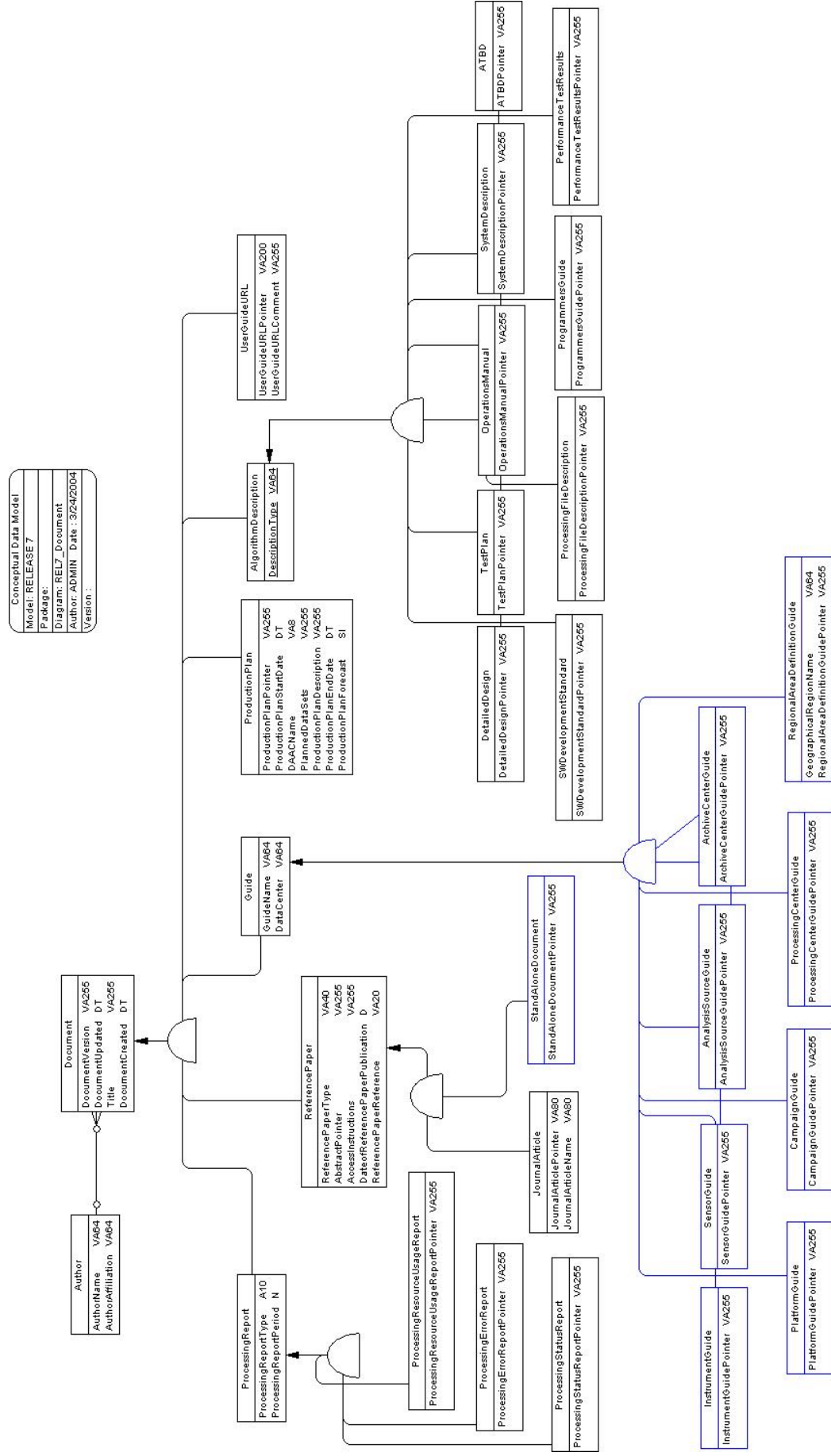


Figure 2-10. Document

2.1.1 Class Definitions

The table below provides a reference list of all classes in the Data Model. Following this table are the class descriptions and list of attributes pertaining to that class.

Table 2-2. Class Reference Table (1 of 4)

1. AdditionalAttributes
2. AdvertisementDescription
3. AdvertisementMaster
4. AlgorithmDescription
5. AlgorithmPackage
6. AlgorithmPackageVersions
7. AltitudeSystemDefinition
8. AnalysisSource
9. AnalysisSourceGuide
10. AncillaryInputGranule
11. ArchiveCenterGuide
12. AssociatedCollections
13. ATBD
14. Author
15. BoundingBoxRectangle
16. Browse
17. Campaign
18. CampaignGuide
19. Circle
20. CollectionAssociation
21. CollectionDescriptionClass
22. Contact
23. ContactAddress
24. ContactOrganization
25. ContactPerson
26. CoordinateRepresentation
27. CoordinateSystemContainer
28. CSDDDescription
29. DAP
30. DepthSystemDefinition
31. DetailedDesign
32. DistanceandBearingRepresentation
33. Document
34. ECSCollection
35. ECSCollectionGuide
36. ECSDDataGranule

Table 2-2. Class Reference Table (2 of 4)

37. ECSPParameter
38. ECSScienceKeywords
39. Email
40. GeodeticModel
41. GeographicCoordinateSystem
42. GPolygon
43. GPolygonContainer
44. GPolygonPoint
45. GranuleLocality
46. GridCoordinateSystem
47. Guide
48. HorizontalCoordinateSystemContainer
49. HorizontalSpatialDomainContainer
50. InformationContent
51. InputGranule
52. InstallableServiceAdvertisement
53. Instrument
54. InstrumentCharacteristic
55. InstrumentCharacteristicValueClass
56. InstrumentGuide
57. JournalArticle
58. LocalCoordinateSystem
59. Locality
60. LocalPlanarCoordinateSystem
61. MapProjection
62. MeasuredParameter
63. MimeServiceAdvertisement
64. MiscellaneousInformation
65. MultipleDateTimePeriod
66. MultipleTypeCollection
67. OperationModeClass
68. OperationsManual
69. OrbitCalculatedSpatialDomain
70. OrbitParametersGranule
71. PerformanceTestResults
72. PGEGroups
73. PhysicalParameterDetails
74. PlanarCoordinateInformation
75. PlanarCoordinateSystem
76. PlanarCoordinateSystemContainer
77. Platform

Table 2-2. Class Reference Table (3 of 4)

78. PlatformCharacteristic
79. PlatformCharacteristicValueClass
80. PlatformGuide
81. Point
82. ProcessingCenterGuide
83. ProcessingFileDescription
84. ProcessingLevel
85. ProcessingQA
86. ProcessingErrorReport
87. ProcessingReport
88. ProcessingResourceUsageReport
89. ProcessingStatusReport
90. ProductAdvertisement
91. ProductionHistory
92. ProductionPlan
93. ProgrammersGuide
94. ProviderAdvertisement
95. QAFlags
96. QAGranule
97. QAStats
98. QualityTextComment
99. RangeDateTime
100. ReferencePaper
101. RegionalAreaDefinitionGuide
102. RegularPeriodic
103. Review
104. Sensor
105. SensorCharacteristic
106. SensorCharacteristicValueClass
107. SensorGuide
108. ServiceAdvertisement
109. SignatureServiceAdvertisement
110. SingleDateTime
111. SingleTypeCollection
112. Spatial
113. SpatialDomainContainer
114. SpatialKeywordClass
115. SSAPComponent
116. StandAloneDocument

Table 2-2. Class Reference Table (4 of 4)

117.	StorageMediumClass
118.	SWDevelopmentStandard
119.	SystemDescription
120.	Telephone
121.	Temporal
122.	TemporalKeywordClass
123.	TemporalType
124.	TestPlan
125.	UserCommentDocument
126.	UserGuide
127.	ValidationDocument
128.	VerticalCoordinateSystemContainer
129.	VerticalSpatialDomain
130.	ZoneIdentifierClass

AdditionalAttributes

Description

This class identifies the product specific attributes (i.e. attributes used to describe the unique characteristics of the collection which extend beyond those defined in this model). The 'values' of attributes defined using this mechanism are contained in the class InformationContent.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AdditionalAttributeDatatype
AdditionalAttributeDescription
AdditionalAttributeName

AdvertisementDescription

Description

This class provides a Description of the Advertisement.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SequenceNumber
Description

AdvertisementMaster

Description

Master for all kinds of Advertisements (product, provider and service).

Attribute List

Name
UniqueID
Title
AdvertisementType
StartDate
ExpirationDate
UpperTitle

AlgorithmDescription

Description

A class providing parameter components for search of the documents and software associated with the SSAP.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
DescriptionType

AlgorithmPackage

Description

This class provides the common characteristics of the algorithms used in product generation. These characteristics include the algorithm package name, date, version, maturity code and generating system characteristics for the package.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PGEVersion
AlgorithmPackageVersion
SWVersion
AlgorithmPackageAcceptanceDate
AlgorithmPackageMaturityCode
AlgorithmPackageName
DeliveryPurpose
PGENAME
PGEIdentifier
PGEFunction
PGEDateLastModified
SWDateLastModified

AlgorithmPackageVersions

Description

Defines the versions (of the Algorithm Package) associated with a software component.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SSAPAlgPackageVersion

AltitudeSystemDefinition

Description

The reference frame or system from which altitudes (elevations) are measured. The term 'altitude' is used instead of the common term 'elevation' to conform to the terminology in Federal Information Processing Standards 70-1 and 173. The class contains the datum name, distance units and encoding method, which provide the definition for the system.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AltitudeDatumName
AltitudeDistanceUnits
AltitudeEncodingMethod
AltitudeResolution

AnalysisSource

Description

This class is used to describe the data acquisition or data processing processes, which characterize a collection. Collections can have both data acquisition and data processing processes associated with them. An example would be a weather analysis collection which included data collected using the NWS ASOS network (PlatformType=Network, PlatformShortName=ASOS) which was processed using an NMC analysis model (e.g. AnalysisType=Model, AnalysisShortName=RAFS, AnalysisDescription=Regional Area Forecast System, AnalysisTechnique= Regional Optimal Interpolation.).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AnalysisType
AnalysisLongName
AnalysisShortName
AnalysisTechnique

AnalysisSourceGuide

Description

This class contains a logical pointer to Analysis Source guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AnalysisSourceGuidePointer

AncillaryInputGranule

Description

This class contains the logical pointer to the ancillary input used in creation of the granule. Many such objects (i.e., files) may occur per granule.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AncillaryInputType
AncillaryInputPointer

ArchiveCenterGuide

Description

This class contains the logical pointer to the archive center guide.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ArchiveCenterGuidePointer

AssociatedCollections

Description

This class contains the ShortNames and VersionIDs of collections associated with this Algorithm Package.

Attribute List

Name
APCollectionShortName
APCollectionVersionID

ATBD

Description

This class contains the logical pointer for the Algorithm Theoretical Basis Document.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ATBDPointer

Author

Description

This class contains the name and affiliation of the author of the document.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0

Attribute List

Name
AuthorName
AuthorAffiliation

BoundingBoxRectangle

Description

This class contains area coverage for ECS collections or granules. This area coverage is expressed by latitude and longitude values in the order western, eastern, northern, and southern - most. For data sets that include a complete band of latitude around the Earth, the west coord = - 180.0 and the east= 180.0. Latitude values are -90.0 to +90.0.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
EastBoundingCoordinate
NorthBoundingCoordinate
SouthBoundingCoordinate
WestBoundingCoordinate

Browse

Description

This class contains the Description and size of a Browse product. The logical pointer to the actual Browse product instance is also included in this class. Its association with the collection

indicates that it can apply to a collection as a whole while its association with a granule indicates that browse products may also occur one or more per granule.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
BrowsePointer
BrowseSize
BrowseDescription
BrowseProductionDateTime

Campaign

Description

This class contains attributes describing the scientific endeavor(s) to which the collection is associated. Scientific endeavors include campaigns, projects, interdisciplinary science investigations, missions, field experiments, etc.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
CampaignShortName
CampaignStartDate
CampaignEndDate
CampaignLongName

CampaignGuide

Description

This class contains a logical pointer to campaign guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
CampaignGuidePointer

Circle

Description

This class identifies the characteristics required to specify the area coverage for a granule or collection as a circle consisting of latitude center, longitude center, radius units, and radius value.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
CenterLatitude
CenterLongitude
RadiusUnits
RadiusValue

CollectionAssociation

Description

This class is used to describe collections associated with the instance of a collection; i.e., the name and other details of input collections, collections associated (in science data terms) with the instance and/or collections dependent on the collection in some way.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
CollectionType
CollectionUse

CollectionDescriptionClass

Description

This class contains brief description of all collections, also includes the short and long names, and the version of the collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
LongName
ShortName
CollectionDescription
VersionID

Contact

Description

This class describes the basic characteristics for a person or an organization type of contact. These contacts may provide information about a Collection, Delivered Algorithm Package, PGE or Data Originator. The role attribute specifies the type of contact and serves to differentiate the use of the module for the various classes associated with it from other modules. System and user profile contact information is held elsewhere.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
Role
HoursofService
ContactInstructions

Contact Address

Description

This class contains the address details for each contact.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
StreetAddress
City
StateProvince
PostalCode
Country

ContactOrganization

Description

This class contains the name of the contact organization. This class is used optionally with ContactPerson. In some instances, ContactOrganization is the primary point of contact.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ContactOrganizationName

ContactPerson

Description

This class contains the contact person's name and position. This class is used optionally with ContactOrganization. In some instances, ContactPerson is the primary point of contact.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ContactFirstName
ContactMiddleName
ContactLastName
ContactJobPosition

CoordinateRepresentation

Description

This class contains the abscissa and ordinate resolutions for the planar coordinates.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AbscissaResolution
OrdinateResolution

CoordinateSystemContainer

Description

A container class (no data content) covering the range of descriptive information held at the collection level concerning the spatial system used for each granule in the collection. Primarily used to establish context within the module.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

CSDTDescription

Description

The class exists to provide a Description of the data organization of the product (i.e. a generalized granule Description in terms of internal structure). There are many possible structures. All should be describable by one of the PrimaryCSDTs (fixed domain), but the specific Implementation has an unbounded domain indicating the range at the lower structured level. While many CSDTs may exist in a granule, only the primary or dominant CSDT is described (e.g. PrimaryCSDT = swath, Implementation = HDF-EOS). The indirect reference is used for collection specific data organization labels. A comment field is provided for further explanation.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PrimaryCSDT
CSDTComments
Implementation
IndirectReference

DAP

Description

This class represents the DeliveredAlgorithmPackage.

Attribute List

Name
DAPID
DAPInsertDate

DepthSystemDefinition

Description

This class contains the characteristics of the reference frame or system from which depths are measured.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
DepthDatumName
DepthDistanceUnits
DepthEncodingMethod
DepthResolution

DetailedDesign

Description

This class contains the logical pointer to detailed design and/or implementation documents.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
DetailedDesignPointer

DistanceandBearingRepresentation

Description

This class contains the resolutions units, direction, and meridian for the planar coordinate system. A method of encoding the position of a point by measuring its distance and direction (azimuth angle) from another point.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
BearingReferenceDirection
BearingReferenceMeridian
BearingResolution
BearingUnits
DistanceResolution

Document

Description

The document class contains common attributes used to specify the title, version, created and update dates for all document types.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
DocumentVersion
DocumentUpdated
Title
DocumentCreated

ECSCollection

Description

This class provides further Description of the collection to include media, revision date, usage, and processing and archive centers. It is associated with many other collection level descriptive classes and modules.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ArchiveCenter
ProcessingCenter
RevisionDate
SuggestedUsage
VersionDescription
DatasetDisclaimerPointer

ECSCollectionGuide

Description

This class contains a logical pointer to collection guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ECSCollectionGuidePointer
ECSCollectionGuidePointerComment

ECSDataGranule

Description

This class provides the descriptive characteristics associated with a granule.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SizeMBECSDataGranule
ReprocessingActual
ReprocessingPlanned
DayNightFlag
GranulePointer
LocalGranuleID
LocalVersionID
ProductionDateTime
PGEVersion

ECSParameter

Description

This class contains keywords, associated with the collection, that provide a more specific Description than provided by the class ECSVariable.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ECSParameterKeyword

ECSScienceKeywords

Description

This class provides the discipline keyword(s) associated with a collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR Marchust 2001, Build B.0. Revisions to the Discipline, Topic and Term Classes have been made to consolidate the three classes into one.

Attribute List

Name
ECSDisciplineKeyword
ECSTopicKeyword
ECSTermKeyword
ECSVariableKeyword

Email

Description

This class contains the electronic mail address of the contact or document author.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ElectronicMailAddress

GeodeticModel

Description

This class contains the parameters describing the shape of the Earth.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
DenominatorofFlatteningRatio
EllipsoidName
HorizontalDatumName
SemiMajorAxis

GeographicCoordinateSystem

Description

This class contains the latitude and longitude resolution and coordinate units which define the position of a point on the Earth's surface with respect to a reference spheroid.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
GeographicCoordinateUnits
LatitudeResolution
LongitudeResolution
GeographicCoordinateInformation
GeographicCoordinateDescription

GPolygon

Description

This class contains the G-Ring attribute for the exclusion ring flag, which is added to each polygon definition to describe whether the polygon is an 'inner' or 'outer' ring of coverage. Outer rings describe the full coverage extent, while inner rings denote areas of missing coverage within the outer ring.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ExclusionGRingFlag

GPolygonContainer

Description

This class contains the G-Ring characteristics which denote the latitude and longitude of a clockwise series of points, which when connected form a polygon. The minimum number of segments is 3. The exclusion ring flag is added to each polygon definition to describe whether the polygon is an 'inner' or 'outer' ring of coverage- outer rings describe the full coverage extent, while inner rings denote areas of missing of coverage within the outer ring. Each set of values must contain exactly two sets of point values (one for latitude and one for longitude).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

GPolygonPoint

Description

This class contains the G-Ring attributes, which denote the latitude, and longitude of the start point of each of a set of geolocation segments, which when combined form a polygon. The sequence numbers determine how to connect the starting points to form the polygon. Each set of values must contain exactly two sets of point values (one for latitude and one for longitude) and a sequence number.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to

provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
GRingPointLatitude
GRingPointLongitude
GRingPointSequenceNo

GranuleLocality

Description

This class contains the value for the granules locality.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
LocalityValue

GridCoordinateSystem

Description

This class contains the name of the grid coordinate system.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
GridCoordinateSystemName

Guide

Description

This class contains the name and data center location of the Guide. This class provides these basic attributes for all guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
GuideName
DataCenter

HorizontalCoordinateSystemContainer

Description

A container class (no data content). This class is used to add context to the module.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

HorizontalSpatialDomainContainer

Description

A container class (no data content). This class is used to add context to the module.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

InformationContent

Description

This class captures the actual values associated with the Additional Attribute class. This is an abstract class since the datatype varies depending on the value of AdditionalAttributeDatatype.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ParameterValue

InputGranule

Description

This class contains the logical pointer to the input granule.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
InputPointer

InstallableServiceAdvertisement

Description

This class contains the information required to install software related to an installable service.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
FtpURL
PackageSize

Instrument

Description

This class defines the device used to measure or record data, including direct human observation. Included in this class are defined EOS Instruments. In cases where instruments have a single sensor or the instrument and sensor are used synonomously (e.g. AVHRR) the both Instrument and sensor should be recorded.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
InstrumentShortName
NumberofSensors
InstrumentLongName
InstrumentTechnique

InstrumentCharacteristic

Description

This class is used to define the characteristics of instrument specific attributes. It should not be used to define attributes of new objects.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to

provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
InstrumentCharacteristicUnit
InstrumentCharacteristicDataType
InstrumentCharacteristicDescription
InstrumentCharacteristicName

InstrumentCharacteristicValueClass

Description

This abstract class is intended to capture the value of the attribute defined using the attributes in the class InstrumentCharacteristics. Instrument specific attributes defined in this way may vary by datatype but must be single values.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
InstrumentCharacteristicValue

InstrumentGuide

Description

The class contains a logical pointer to instrument guides.

Attribute List

Name
InstrumentGuidePointer

JournalArticle

Description

This class contains the Journal Article name and logical pointer to the article.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
JournalArticlePointer
JournalArticleName

LocalCoordinateSystem

Description

This class contains a description of the coordinate system and georeference information.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
LocalCoordinateSystemDescription
LocalGeoreferenceInformation

Locality

Description

This class is used at the collection level to describe the labelling of granules with compounded time/space text values and which are subsequently used to define more phenomenologically-based collections, thus the locality type and description are contained in this class.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
LocalityType
LocalityDescription

LocalPlanarCoordinateSystem

Description

This class contains a description of the system and georeference information.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
LocalPlanarCoordinateSystemDescription
LocalPlanarGeoreferenceInformation

MapProjection

Description

This class contains the name of the map projection [the systematic representation of all or part of the surface of the Earth on a plane or developable surface], and a logical pointer to the map projection details, which are specified separately. ECS currently supports a number of projections which are specified separately.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
MapProjectionName
MapProjectionPointer

MeasuredParameter

Description

This class contains the name of the geophysical parameter expressed in the data.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ParameterName

MimeServiceAdvertisement

Description

Readable service through web.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ServiceURL

MiscellaneousInformation

Description

The EDG client as the hypertext links uses this class for corresponding URLs. The MiscellaneousInformation is included within a dataset being distributed to the user, the metadata file (. met file) that accompanies the distribution will include, in addition to the product information the UserGuide (ECSCollectionGuide) and the DatasetDisclaimer (DatasetDisclaimer), if available for the dataset.

Annotation

311-CD, June 2000, Release B Science Data Processing Segment (SDPS) Database Design and Database Specifications for the ECS Project.

Attribute List

Name	
MiscellaneousInformationPointer	VA200
MiscellaneousInformationPointerComment	VA255

MultipleDateTimePeriod

Description

This class contains the name of the multiple date period. Multiple version of SingleDateTime, generally used at the collection level.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name	
MultipleDateName	

MultipleTypeCollection

Description

This class contains the value, relationship and type for the multiple type collection. This class is used only when aggregating single type or other multiple type collections has developed the collection and/or granules using criteria, which is recorded using the aggregation attributes.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AggregationRelationship
AggregationType
AggregationValue

OperationModeClass

Description

This class identifies the instrument's operational modes associated with the channel, wavelength, and FOV (e.g., launch, survival, initialization, safe, diagnostic, standby, crosstrack, biaxial, solar calibration).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
OperationMode

OperationsManual

Description

This class contains a logical pointer to the operations manual.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
OperationsManualPointer

OrbitCalculatedSpatialDomain

Description

This class is used to describe the characteristics of the orbit calculated spatial domain to include the model name, orbit number, start and stop orbit number, equator crossing date and time, and equator crossing longitude.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
EquatorCrossingDate
EquatorCrossingLongitude
EquatorCrossingTime
OrbitalModelName
OrbitNumber
StartOrbitNumber
StopOrbitNumber

OrbitParametersGranule

Description

This class contains the logical pointer to the orbit parameter granule. This class contains orbit data for which an association with the granule database exists.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
OrbitParametersPointer

PerformanceTestResults

Description

This class contains a logical pointer to the performance test results.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PerformanceTestResultsPointer

PGEGroups

Description

This class contains the attributes identifying and describing the PGE.

Attribute List

Name
DAPPGEName
DAPPGEVersion
DAPSWVersion

PhysicalParameterDetails

Description

This class is used to provide further information about the physical or geophysical parameters specified in the AdditionalAttributes and ECSPParameters. It contains the units of measurement, range, accuracy, explanation and resolution.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ParameterMeasurementResolution
ParameterRangeBegin
ParameterUnitsofMeasurement
ParameterValueAccuracy
ParameterValueAccuracyExplanation
ParameterRangeEnd

PlanarCoordinateInformation

Description

This class contains information about the coordinate system developed on the planar surface to include the distance units and encoding method.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PlanarCoordinateEncodingMethod
PlanarDistanceUnits

PlanarCoordinateSystem

Description

This class is used to add context to the module (no data content). This container is made up of the distance and angles, which define the position of a point on a reference plane to which the surface of the Earth has been projected.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

PlanarCoordinateSystemContainer

Description

This class is used to add context to the module (no data content). This container is made up of the distance and angles, which define the position of a point on a reference plane to which the surface of the Earth has been projected.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

Platform

Description

This class describes the relevant platforms associated with the acquisition of the collection or granule. Platform types include Spacecraft, Aircraft, Vessel, Buoy, Platform, Station, Network or Human. In cases where Human is the platform type it should be of scientific relevancy to the collection. If an instrument is hand held and that is relevant to the collection of the data then PlatformType=Human. In cases where an instrument is hand-held but the human is associated with another platform then all relevant platforms should be associated with the collection. Humans can be both Platforms and Instruments (e.g. if a human is standing on the ground and makes a visual observation then: PlatformType=Human, Instrument=HumanObservation, SensorShortName=HumanVisual).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PlatformShortName
PlatformType
PlatformLongName

PlatformCharacteristic

Description

This class is used to define the characteristics of platform specific attributes. It should not be used to define attributes of new objects.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PlatformCharacteristicName
PlatformCharacteristicUnit
PlatformCharacteristicDataType
PlatformCharacteristicDescription

PlatformCharacteristicValueClass

Description

This abstract class is intended to capture the value of the attribute defined using the attributes in the class PlatformCharacteristics. Platform specific attributes defined in this way may vary by datatype but must be single values.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PlatformCharacteristicValue

PlatformGuide

Description

This class contains a logical pointer to platform guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PlatformGuidePointer

Point

Description

This class identifies the characteristics of the point area coverage to include the latitude and longitude.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
PointLatitude
PointLongitude

ProcessingCenterGuide

Description

This class contains a logical pointer to processing center guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingCenterGuidePointer

ProcessingFileDescription

Description

This class contains a logical pointer to the processing file description which details the file and record layouts for each PGE.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingFileDescriptionPointer

ProcessingLevel

Description

The processing level class contains the level identifier and level description of the collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to

provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingLevelDescription
ProcessingLevelID

ProcessingQA

Description

This class contains the name of the attribute in error in addition to a brief description of the error that occurred during processing.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingQADescription
ProcessingQAAttribute

ProcessingErrorReport

Description

This class contains a logical pointer to the processing error report which is produced by the ECS Planning Subsystem.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingErrorReportPointer

ProcessingReport

Description

This class contains the type and period of the processing report which is produced by the ECS Planning Subsystem.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingReportType
ProcessingReportPeriod

ProcessingResourceUsageReport

Description

This class contains the logical pointer to the processing resource usage report.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingResourceUsageReportPointer

ProcessingStatusReport

Description

This class contains a logical pointer to the processing status report produced by the ECS Planning Subsystem.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProcessingStatusReportPointer

ProductAdvertisement

Description

Advertisement about the data in ECS or non-ECS data

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

ProductionHistory

Description

The Processing History class contains a logical pointer to the processing history, which provides information about the processing of each granule, associated with the granule database. This includes the input products and granules used to generate the product.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProductionHistoryPointer

ProductionPlan

Description

This class contains the dates, forecast, description, and planned data sets associated with the production plan in addition to the logical pointer to the production plan. This class has searchable attributes plus a pointer to a specification for the plans produced by the ECS Planning Subsystem.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProductionPlanPointer
ProductionPlanStartDate
DAACName
PlannedDataSets
ProductionPlanDescription
ProductionPlanEndDate
ProductionPlanForecast

ProgrammersGuide

Description

This class contains the logical pointer to the programmers guide.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProgrammersGuidePointer

ProviderAdvertisement

Description

This class describes the person or organization that provides the Advertisement. This class must be populated if ServiceAdvertisement or ProductAdvertisement are populated.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ProviderURL

QAFlags

Description

This class contains the science, operational and automatic quality flags which indicate the overall quality assurance levels of specific parameter values within a granule.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AutomaticQualityFlag
OperationalQualityFlag
ScienceQualityFlagExplanation
ScienceQualityFlag
OperationalQualityFlagExplanation
AutomaticQualityFlagExplanation

QAGranule

Description

This class specifies the logical pointer to the QA granule. This class contains material for a separate file or files containing user specified QA information about the granule.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
QAGranulePointer

QAStats

Description

This class contains measures of quality for the granule. The parameters used to set these measures are not preset and will be determined by the data producer. Each set of measures can occur many times either for the granule as a whole or for individual parameters.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
QAPercentInterpolatedData
QAPercentMissingData
QAPercentOutOfBoundsData
QAPercentCloudCover

QualityTextComment

Description

A class containing a logical pointer to documents which record details of quality measurement and other comments concerning the collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
QualityTextCommentPointer

RangeDateTime

Description

This class specifies the start and end date/time of a granule or collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
RangeBeginningDate
RangeBeginningTime
RangeEndingDate
RangeEndingTime

ReferencePaper

Description

The reference paper class defines the common properties of the underlying reference material, and inherits further attributes from the Document Class.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ReferencePaperType
AbstractPointer
AccessInstructions
DateofReferencePaperPublication
ReferencePaperReference

RegionalAreaDefinitionGuide

Description

This class contains the geographic region name and the logical pointer to the regional area definition guides.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
GeographicalRegionName
RegionalAreaDefinitionGuidePointer

RegularPeriodic

Description

This class contains the name of the temporal period in addition to the date, time, duration unit, and value, and cycle duration unit and value. Used at the collection level to describe a collection having granules, which cover a regularly occurring period.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
Period1stDate
Period1stTime
PeriodCycleDurationUnit
PeriodCycleDurationValue
PeriodDurationUnit
PeriodDurationValue
PeriodName

Review

Description

This class provides for dates and status as applicable for collections, which are active.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
FutureReviewDate
ScienceReviewDate
ScienceReviewStatus

Sensor

Description

This class is used to describe sensory subcomponents of an instrument. In cases where instruments have a single sensor or the Instrument and Sensor are used synonymously (e.g. AVHRR) both the Instrument and Sensor should be recorded.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SensorShortName
SensorLongName
SensorTechnique

SensorCharacteristic

Description

This class is used to define the characteristics of sensor specific attributes. It should not be used to define attributes of new objects.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SensorCharacteristicUnit
SensorCharacteristicDataType
SensorCharacteristicDescription
SensorCharacteristicName

SensorCharacteristicValueClass

Description

This abstract class is intended to capture the value of the attribute defined using the attributes in the class SensorCharacteristics. Sensor specific attributes defined in this way may vary by datatype but must be single values.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to

provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SensorCharacteristicValue

SensorGuide

Description

This class contains a logical pointer to the sensor guides.

Attribute List

Name
SensorGuidePointer

ServiceAdvertisement

Description

Description of software typically accessing data found in ProductAdvertisement.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

SignatureServiceAdvertisement

Description

This class contains information that describes services, which are executed using an argument list.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to

provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ServiceClass
ServiceName
GIPparameterList
AdvertisementUR
Internal Name

SingleDateTime

Description

This class contains the time of day and calendar date for an ECS granule. This class provides a means of encoding a single date and time for a granule occurring at that time or during the period covered by the time (e.g. one-day for a single date excluding the time within the day).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
CalendarDate
TimeofDay

SingleTypeCollection

Description

This class provides a description specific to a single, as opposed to a multitype collection, to include citation of external publication, collection state, maintenance and update frequency, and access constraints. The definition of a singletype collection is stated below. The management and development of singletype collections is the subject of other documentation. A single type collection contains a set of granules for which the dominant variation in the value of metadata attributes is in the space and time attributes. For example, most level 0, 1, and many level 2 collections conform to this definition.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
AccessConstraints
CitationforExternalPublication
CollectionState
MaintenanceandUpdateFrequency

Spatial

Description

Largely a container class, but carrying an attribute indicating the general type of coverage.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SpatialCoverageType

SpatialDomainContainer

Description

A container class (no data content) used to add context to the module.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

SpatialKeywordClass**Description**

This class contains the spatial keywords associated with the ECS collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SpatialKeyword

SSAPComponent**Description**

Defines a piece of an SSAP (Science Software Algorithm Package).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ComponentType
ComponentName
SSAPAlgorithmPackageName
SSAPInsertDate

StandAloneDocument

Description

This class contains the logical pointer to the stand-alone document, which is a document not published in journals.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
StandAloneDocumentPointer

StorageMediumClass

Description

This class contains the medium on which the data are stored.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
StorageMedium

SWDevelopmentStandard

Description

This class contains a logical pointer to the software development standard. Separate document.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to

provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SWDevelopmentStandardPointer

SystemDescription

Description

Separately specified description of science software processing system.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
SystemDescriptionPointer

Telephone

Description

This class contains the telephone details associated with the contact.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
TelephoneNumberType
TelephoneNumber

Temporal

Description

This class contains attributes, which describe the basis of the time system used in other classes.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
DateType
TemporalRangeType
TimeType
EndsatPresentFlag
PrecisionofSeconds

TemporalKeywordClass

Description

This class identifies the type of temporal characterization for a granule or collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
TemporalKeyword

TemporalType

Description

This class contains the type (range or single) of temporal being used for a granule or collection.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
TemporalType

TestPlan

Description

This class contains the logical pointer to the test plan for the PGE.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
TestPlanPointer

UserCommentDocument

Description

A class containing a logical pointer to documents used to record user comments on the collection

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
UserCommentDocumentPointer

UserGuide

Description

The EDG Client as the hypertext uses this class for the corresponding URLs. The user can then access the user's guide and miscellaneous data before he or she places an order. As an order is placed for a specific product, corresponding dataset disclaimer message will be presented to the user.

Annotation

311 CD, June 2000, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project.

Attribute List

Name	
UserGuidePointer	VA200
UserGuidePointerComment	VA255

ValidationDocument

Description

A class containing a logical pointer to a document used to record details of validation steps used for the assessment of granule and overall collection quality.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name	
ValidationDocumentPointer	

VerticalCoordinateSystemContainer

Description

A container class (no data content). This class is used to add context to the module. The reference frame or system from which vertical distances (altitudes or depths are measured).

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
N/A

VerticalSpatialDomain

Description

This class contains the domain value and type for the vertical spatial domain.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
VerticalSpatialDomainType
VerticalSpatialDomainValue

ZonelfIdentifierClass

Description

This class contains the zone identifier of the various zones in the associated grid coordinate system. See domain values of coordinate system for constraints on the zone numbers.

Annotation

311-CD-008-001, May 15, 1996, Release B Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project (with changes from July 1996 to provide updated details for the Data Server and CIDM subsystems). Additionally, updates from Release B, (311-CD-008-001), CCR January 31, 1997, Build B.0.

Attribute List

Name
ZoneIdentifier

2.2 Earth Science Metadata Specifications

Descriptions of the attribute specifications found within the Power Designer tool are presented in the following section. Each attribute will contain all relevant information for that attribute.

Table 2-2 provides an attribute with appropriate datatypes (DT).

Data Item List

Table 2-3. Attribute Reference (1 of 9)

Name	Data Type
1. AbscissaResolution	F7
2. AbstractPointer	VA255
3. AccessConstraints	VA255
4. AccessInstructions	VA255
5. AdditionalAttributeDatatype	A10
6. AdditionalAttributeDescription	VA255
7. AdditionalAttributeName	VA40
8. AdvertisementType	VA80
9. AdvertisementUR	TXT
10. AggregationRelationship	VA2
11. AggregationType	VA20
12. AggregationValue	VA80
13. AlgorithmPackageAcceptanceDate	DT
14. AlgorithmPackageMaturityCode	A10
15. AlgorithmPackageName	VA80
16. AlgorithmPackageVersion	VA20
17. AltitudeDatumName	VA40
18. AltitudeDistanceUnits	VA20
19. AltitudeEncodingMethod	VA255
20. AltitudeResolution	F
21. AnalysisLongName	VA80
22. AnalysisShortName	VA20
23. AnalysisSourceGuidePointer	VA255
24. AnalysisTechnique	VA80
25. AnalysisType	VA20
26. AncillaryInputPointer	VA255

Table 2-3. Attribute Reference (2 of 9)

Name	Data Type
27. AncillaryInputType	VA20
28. APCollectionShortName	A8
29. APCollectionVersionID	SI
30. ArchiveCenter	VA20
31. ArchiveCenterGuidePointer	VA255
32. ATBDPointer	VA255
33. AuthorAffiliation	VA64
34. AuthorName	VA64
35. AutomaticQualityFlag	VA64
36. AutomaticQualityFlagExplanation	VA255
37. BearingReferenceDirection	VA20
38. BearingReferenceMeridian	VA255
39. BearingResolution	F16
40. BearingUnits	VA255
41. BrowseDescription	VA255
42. BrowsePointer	VA255
43. BrowseProductionDateTime	DT
44. BrowseSize	F5
45. CalendarDate	DT
46. CampaignEndDate	DT
47. CampaignGuidePointer	VA255
48. CampaignLongName	VA80
49. CampaignShortName	VA20
50. CampaignStartDate	DT
51. CenterLatitude	LF
52. CenterLongitude	LF
53. CitationforExternalPublication	VA255
54. City	VA30
55. CollectionDescription	VA255
56. CollectionState	A10
57. CollectionType	VA20
58. CollectionUse	VA500
59. ComponentName	VA80
60. ComponentType	VA40
61. ContactFirstName	VA255
62. ContactInstructions	VA255
63. ContactJobPosition	VA255
64. ContactLastName	VA255
65. ContactMiddleName	VA255

Table 2-3. Attribute Reference (3 of 9)

Name	Data Type
66. ContactOrganizationName	VA255
67. Country	VA10
68. CSDTComments	VA255
69. DAACName	VA8
70. DAPID	VA12
71. DAPInsertDate	DT
72. DAPPGEName	VA30
73. DAPPGVersion	VA20
74. DAPSWVersion	VA12
75. DataCenter	VA64
76. DatasetDisclaimerPointer	VA200
77. DateofReferencePaperPublication	DT
78. DateType	A10
79. DayNightFlag	A5
80. DeliveryPurpose	VA20
81. DenominatorofFlatteningRatio	F5
82. DepthDatumName	VA80
83. DepthDistanceUnits	VA20
84. DepthEncodingMethod	VA255
85. DepthResolution	F7
86. Description	VA255
87. DescriptionType	VA64
88. DetailedDesignPointer	VA255
89. DistanceResolution	F7
90. DocumentCreated	DT
91. DocumentUpdated	DT
92. DocumentVersion	VA255
93. EastBoundingCoordinate	LF
94. ECSCollectionGuidePointer	VA200
95. ECSCollectionGuidePointerComment	VA255
96. ECSDisciplineKeyword	VA80
97. ECSPParameterKeyword	VA80
98. ECSTermKeyword	VA80
99. ECSTopicKeyword	VA80
100. ECSVariableKeyword	VA80
101. ElectronicMailAddress	VA255
102. EllipsoidName	VA255
103. EndsatPresentFlag	A1
104. EquatorCrossingDate	D

Table 2-3. Attribute Reference (4 of 9)

	Name	Data Type
105.	EquatorCrossingLongitude	F11
106.	EquatorCrossingTime	T
107.	ExclusionGRingFlag	A1
108.	ExpirationDate	DT
109.	FtpURL	VA100
110.	FutureReviewDate	DT
111.	GeographicalRegionName	VA64
112.	GeographicCoordinateDescription	VA255
113.	GeographicCoordinateInformation	VA255
114.	GeographicCoordinateUnits	VA80
115.	GIPParameterList	TXT
116.	GranulePointer	VA255
117.	GridCoordinateSystemName	VA255
118.	GRingPointLatitude	LF
119.	GRingPointLongitude	LF
120.	GRingPointSequenceNo	I
121.	GuideName	VA64
122.	HorizontalDatumName	VA30
123.	HoursofService	VA255
124.	Implementation	VA100
125.	IndirectReference	VA100
126.	InputPointer	VA255
127.	InstrumentCharacteristicDataType	A8
128.	InstrumentCharacteristicDescription	VA80
129.	InstrumentCharacteristicName	VA40
130.	InstrumentCharacteristicUnit	VA20
131.	InstrumentCharacteristicValue	VA15
132.	InstrumentGuidePointer	VA255
133.	InstrumentLongName	VA80
134.	InstrumentShortName	VA20
135.	InstrumentTechnique	VA80
136.	Internal Name	VA100
137.	JournalArticleName	VA80
138.	JournalArticlePointer	VA80
139.	LatitudeResolution	F
140.	LocalCoordinateSystemDescription	VA255
141.	LocalGeoreferenceInformation	VA255
142.	LocalGranuleID	VA80
143.	LocalityDescription	VA255

Table 2-3. Attribute Reference (5 of 9)

	Name	Data Type
144.	LocalityType	VA20
145.	LocalityValue	VA80
146.	LocalPlanarCoordinateSystemDescription	VA255
147.	LocalPlanarGeoreferenceInformation	VA255
148.	LocalVersionID	VA60
149.	LongitudeResolution	F
150.	LongName	VA80
151.	MaintenanceandUpdateFrequency	VA80
152.	MapProjectionName	VA80
153.	MapProjectionPointer	VA255
154.	MiscellaneousInformationPointer	VA200
155.	MiscellaneousInformationPointerComment	VA255
156.	MultipleDateName	VA30
157.	NorthBoundingCoordinate	LF
158.	NumberOfSensors	I
159.	OperationalQualityFlag	VA20
160.	OperationalQualityFlagExplanation	VA255
161.	OperationMode	VA20
162.	OperationsManualPointer	VA80
163.	OrbitalModelName	VA80
164.	OrbitNumber	I
165.	OrbitParametersPointer	VA255
166.	OrdinateResolution	F7
167.	PackageSize	I
168.	ParameterMeasurementResolution	VA30
169.	ParameterName	VA40
170.	ParameterRangeBegin	VA40
171.	ParameterRangeEnd	VA40
172.	ParameterUnitsofMeasurement	VA20
173.	ParameterValue	VA255
174.	ParameterValueAccuracy	VA30
175.	ParameterValueAccuracyExplanation	VA255
176.	PerformanceTestResultsPointer	VA255
177.	Period1stDate	DT
178.	Period1stTime	T
179.	PeriodCycleDurationUnit	VA15
180.	PeriodCycleDurationValue	F7
181.	PeriodDurationUnit	VA15
182.	PeriodDurationValue	F7

Table 2-3. Attribute Reference (6 of 9)

	Name	Data Type
183.	PeriodName	VA30
184.	PGEDateLastModified	DT
185.	PGEFunction	VA80
186.	PGEIdentifier	A10
187.	PGENAME	VA20
188.	PGEVersion	A10
189.	PlanarCoordinateEncodingMethod	VA80
190.	PlanarCoordinateInformation	VA255
191.	PlanarDistanceUnits	VA80
192.	PlannedDataSets	VA255
193.	PlatformCharacteristicDataType	A8
194.	PlatformCharacteristicDescription	VA80
195.	PlatformCharacteristicName	VA40
196.	PlatformCharacteristicUnit	VA20
197.	PlatformCharacteristicValue	VA20
198.	PlatformGuidePointer	VA255
199.	PlatformLongName	VA80
200.	PlatformShortName	VA20
201.	PlatformType	VA20
202.	PointLatitude	LF
203.	PointLongitude	LF
204.	PostalCode	VA20
205.	PrecisionofSeconds	I
206.	PrimaryCSDT	VA30
207.	ProcessingCenter	VA20
208.	ProcessingCenterGuidePointer	VA255
209.	ProcessingErrorReportPointer	VA255
210.	ProcessingFileDescriptionPointer	VA255
211.	ProcessingLevelDescription	VA80
212.	ProcessingLevelID	A6
213.	ProcessingQAAttribute	VA80
214.	ProcessingQADescription	VA255
215.	ProcessingReportPeriod	N
216.	ProcessingReportType	A10
217.	ProcessingResourceUsageReportPointer	VA255
218.	ProcessingStatusReportPointer	VA255
219.	ProductionDateTime	DT
220.	ProductionHistoryPointer	VA255
221.	ProductionPlanDescription	VA255

Table 2-3. Attribute Reference (7 of 9)

	Name	Data Type
222.	ProductionPlanEndDate	DT
223.	ProductionPlanForecast	SI
224.	ProductionPlanPointer	VA255
225.	ProductionPlanStartDate	DT
226.	ProgrammersGuidePointer	VA255
227.	ProviderURL	VA255
228.	QAGranulePointer	VA255
229.	QAPercentCloudCover	I
230.	QAPercentInterpolatedData	I
231.	QAPercentMissingData	I
232.	QAPercentOutOfBoundsData	I
233.	QualityTextCommentPointer	VA255
234.	RadiusUnits	A10
235.	RadiusValue	F
236.	RangeBeginningDate	DT
237.	RangeBeginningTime	T
238.	RangeEndingDate	DT
239.	RangeEndingTime	T
240.	ReferencePaperReference	VA20
241.	ReferencePaperType	VA40
242.	RegionalAreaDefinitionGuidePointer	VA255
243.	ReprocessingActual	VA20
244.	ReprocessingPlanned	VA45
245.	RevisionDate	DT
246.	Role	VA20
247.	ScienceQualityFlag	VA25
248.	ScienceQualityFlagExplanation	VA255
249.	ScienceReviewDate	DT
250.	ScienceReviewStatus	VA20
251.	SemiMajorAxis	F8
252.	SensorCharacteristicDataType	A8
253.	SensorCharacteristicDescription	VA80
254.	SensorCharacteristicName	VA40
255.	SensorCharacteristicUnit	VA20
256.	SensorCharacteristicValue	VA80
257.	SensorGuidePointer	VA255
258.	SensorLongName	VA80
259.	SensorShortName	VA20
260.	SensorTechnique	VA80

Table 2-3. Attribute Reference (8 of 9)

	Name	Data Type
261.	SequenceNumber	I
262.	ServiceClass	VA100
263.	ServiceName	VA100
264.	ServiceURL	VA100
265.	ShortName	A8
266.	SizeMBECSDDataGranule	F10
267.	SouthBoundingCoordinate	LF
268.	SpatialCoverageType	A10
269.	SpatialKeyword	A40
270.	SSAPAlgorithmPackageName	VA80
271.	SSAPAlgPackageVersion	VA20
272.	SSAPInsertDate	DT
273.	StandAloneDocumentPointer	VA255
274.	StartDate	DT
275.	StartOrbitNumber	I
276.	StateProvince	VA30
277.	StopOrbitNumber	I
278.	StorageMedium	VA30
279.	StreetAddress	VA80
280.	SuggestedUsage	VA500
281.	SWDateLastModified	DT
282.	SWDevelopmentStandardPointer	VA255
283.	SWVersion	VA12
284.	SystemDescriptionPointer	VA255
285.	TelephoneNumber	VA23
286.	TelephoneNumberType	A10
287.	TemporalKeyword	VA40
288.	TemporalRangeType	VA30
289.	TemporalType	VA10
290.	TestPlanPointer	VA255
291.	TimeofDay	T
292.	TimeType	A10
293.	Title	VA100
294.	UniqueID	N8
295.	UpperTitle	VA100
296.	UserCommentDocumentPointer	VA255
297.	UserGuideCommentPointer	A255
298.	UserGuidePointer	A200
299.	ValidationDocumentPointer	VA255

Table 2-3. Attribute Reference (9 of 9)

	Name	Data Type
300.	VersionDescription	VA255
301.	VersionID	SI
302.	VerticalSpatialDomainType	VA20
303.	VerticalSpatialDomainValue	VA20
304.	WestBoundingCoordinate	LF
305.	ZonIdentifier	VA64

AbscissaResolution

Description

The (nominal) minimum distance between the 'x' or column values of two adjacent points, expressed in Planar Distance Units of measure. Planar Distance Units of measure are units used for distances whose domain values are meters, international feet, and survey feet.

Content Source: DP

Constraints: AbscissaResolution > 0.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CoordinateRepresentation

AbstractPointer

Description

Pointer to the reference paper article abstract.

Content Source: DP

Constraints: if abstract exists (must for all papers), this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ReferencePaper

AccessConstraints

Description

Restrictions and legal prerequisites for accessing the collection. These include any access constraints applied to assure the protection of privacy or intellectual property, and any special restrictions or limitations on obtaining the collection.

These restrictions differ from Use Restrictions in that they only apply to access.

Content Source: DP; DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SingleTypeCollection

Description

Free Text

Unknown

None

AccessInstructions

Description

Instructions describing how to obtain electronic access to a stand-alone document. May simply be an anonymous ftp site address, or a World Wide Web homepage URL. Data Provider Sites may establish additional instruction requirements.

Content Source: DP; DAAC

Constraints: if reference papers utilized, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ReferencePaper

Description

Free Text

AdditionalAttributeDatatype

Description

Data type of ParameterValue.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AdditionalAttributes

Description

int

varchar

float

date

time

datetime

AdditionalAttributeDescription

Description

This attribute provides a description for the AdditionalAttributeName.

Content Source: DP

Constraints: If AdditionalAttributeName exists then AdditionalAttribute must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AdditionalAttributes

Description

Free Text

AdditionalAttributeName

Description

Data type of AdditionalAttributeName.

Content Source: DP

Constraints: If AdditionalAttributeName exists then AdditionalAttributeDatatype must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AdditionalAttributes

Description

ALBEDOTABLEID
AVERAGEREFLDISCRIMINATION
AVERAGERMSE
AscendingDescendingFlg
AveragedBlackbodyTemperature
BAND1_GAIN
BAND1_GAIN_CHANGE
BAND1_SL_GAIN_CHANGE
BAND2_GAIN
BAND2_GAIN_CHANGE
BAND2_SL_GAIN_CHANGE
BAND3_GAIN
BAND3_GAIN_CHANGE
BAND3_SL_GAIN_CHANGE
BAND4_GAIN
BAND4_GAIN_CHANGE
BAND4_SL_GAIN_CHANGE
BAND5_GAIN
BAND5_GAIN_CHANGE
BAND5_SL_GAIN_CHANGE
BAND6_GAIN_CHANGE_F1
BAND6_GAIN_CHANGE_F2
BAND6_GAIN_F1

BAND6_GAIN_F2
 BAND6_SL_GAIN_CHANGE_F1
 BAND6_SL_GAIN_CHANGE_F2
 BAND7_GAIN
 BAND7_GAIN_CHANGE
 BAND7_SL_GAIN_CHANGE
 BAND8_GAIN
 BAND8_GAIN_CHANGE
 BAND8_SL_GAIN_CHANGE
 BRDFCODEID
 CLOUDPERCENT
 CirrusCloudDetectedPct_IR
 ClearPct250m
 CloudCoverFractionPct_VIS
 CloudCoverPct250m
 CloudPct_IR
 CloudPhaseUncertainPct_IR
 DayProcessedPct
 ECOREGIONLABELS
 ECSMSDBAArchivedOn
 ECSMSDBADatabaseName
 ECSMSDBADatafileName
 ECSMSDBASchemaVersionID
 ECSMSDBAServerName
 ECSMSDBATableName
 ECSMSDBATablesetName
 ECSMSSLGHostName
 ECSMSSLGMode
 EndDataDay
 ExeInsertDate
 ExePGENAME
 ExePGESSWVersion
 ExePlatformOS
 ExePlatformOSVersion
 FIREPIXELS
 FailedPGEInsertDateTime
 FailedPGENAME
 FailedPGEVersion
 F1_F2_SCENE_CORNERS
 GLOBALECOTYPE1ACCURACY
 GLOBALECOTYPE1ACCURACYTABLE
 GLOBALECOTYPE1KAPPA
 GLOBALECOTYPE2ACCURACY
 GLOBALECOTYPE2ACCURACYTABLE

GBALECOTYPE2KAPPA
GBALLANDCOVERACCURACY
GBALLANDCOVERACCURACYTABLE
GBALLANDCOVERKAPPA
GRANULENUMBER
HighCloudDetectedPct_IR
HighConfidentClearPct
IceCloudDetectedPct_IR
IceCloudDetectedPct_VIS
LANDCOVERCLASSESPRESENTINTILE
LandCoverFractionPct
LandProcessedPct
LowCloudDetectedPct_IR
LowConfidentClearPct
MODELDEFFILEID
MaxSolarZenithAngle
MidCloudDetectedPct_IR
MinSolarZenithAngle
MixedCloudDetectedPct_IR
NightProcessedPct
NonCloudObstructionFoundPct
ORIG_PARTIAL_WRS_SCENES
ORIG_TOTAL_WRS_SCENES
OceanCoverFractionPct
OpaqueCloudDetectedPct_IR
PCD_START_TIME
PCD_STOP_TIME
PDS_ID
PERCENTANCREFS
PERCENTBARE
PERCENTBROADLEAF
PERCENTCHANGEDPIXELS
PERCENTDECIDUOUS
PERCENTEVERGREEN
PERCENTFOREST
PERCENTHERBACEOUS
PERCENTLANDINTILE
PERCENTMODELFIXEDBRDFS
PERCENTMODERATEQUALITY
PERCENTNEARNADIR15REFS
PERCENTNEEDLELEAF
PERCENTNEWBRDFS
PERCENTNONFORESTVEG
PERCENTNOTPRODUCED

PERCENTPOORQUALITY
PERCENTSHAPEFIXEDBRDFS
PERCENTSUBSTITUTEBRDFS
PERCENTWOODY
PRODUCT_LL_CORNER_LAT
PRODUCT_LL_CORNER_LON
PRODUCT_LR_CORNER_LAT
PRODUCT_LR_CORNER_LON
PRODUCT_UL_CORNER_LAT
PRODUCT_UL_CORNER_LON
PRODUCT_UR_CORNER_LAT
PRODUCT_UR_CORNER_LON
QAPERCENTGOODQUALITY
QAPERCENTNOTPRODUCEDCLOUD
QAPERCENTNOTPRODUCEDOTHER
QAPERCENTOTHERQUALITY
QAPERCENTPOOROUTPUT1KMBAND1
QAPERCENTPOOROUTPUT1KMBAND2
QAPERCENTPOOROUTPUT1KMBAND3
QAPERCENTPOOROUTPUT1KMBAND4
QAPERCENTPOOROUTPUT1KMBAND5
QAPERCENTPOOROUTPUT1KMBAND6
QAPERCENTPOOROUTPUT1KMBAND7
QAPERCENTPOOROUTPUT250MBAND1
QAPERCENTPOOROUTPUT250MBAND2
QAPERCENTPOOROUTPUT500MBAND1
QAPERCENTPOOROUTPUT500MBAND2
QAPERCENTPOOROUTPUT500MBAND3
QAPERCENTPOOROUTPUT500MBAND4
QAPERCENTPOOROUTPUT500MBAND5
QAPERCENTPOOROUTPUT500MBAND6
QAPERCENTPOOROUTPUT500MBAND7
QAPERCENTPOORQ1KM16DAYEVI
QAPERCENTPOORQ1KM16DAYNDVI
QAPERCENTPOORQ1KMMONTHEVI
QAPERCENTPOORQ1KMMONTHNDVI
QAPERCENTPOORQ250M16DAYNDVI
QAPERCENTPOORQCMG16DAYEVI
QAPERCENTPOORQCMG16DAYNDVI
QAPERCENTPOORQCMGMONTHEVI
QAPERCENTPOORQCMGMONTHNDVI
QA_BAND1_PRESENT
QA_BAND2_PRESENT
QA_BAND3_PRESENT

QA_BAND4_PRESENT
QA_BAND5_PRESENT
QA_BAND6_PRESENT_F1
QA_BAND6_PRESENT_F2
QA_BAND7_PRESENT
QA_BAND8_PRESENT
QA_DAY_NIGHT_FLAG
QA_ENTIRELY_FILLED_SCANS
QA_ETM_TIMECODE_ERRORS
QA_FILLED_PCD_MAJOR_FRAMES
QA_FILLED_PCD_MINOR_FRAMES
QA_FULL_APERTURE_CAL_FLAG
QA_FULL_OR_PARTIAL_SCENE
QA_HORIZONTAL_DISPLAY_SHIFT
QA_LL_QUAD_CCA
QA_LR_QUAD_CCA
QA_MISSING_ATTITUDE_POINTS
QA_MISSING_EPHEMERIS_POINTS
QA_PARTIALLY_FILLED_SCANS
QA_REJECTED_ATTITUDE_POINTS
QA_REJECTED_EPHEMERIS_POINTS
QA_SCENE_CCA
QA_SCENE_QUALITY
QA_TOTAL_ATTITUDE_POINTS
QA_TOTAL_EPHEMERIS_POINTS
QA_TOTAL_PCD_MINOR_FRAMES
QA_UL_QUAD_CCA
QA_UR_QUAD_CCA
SCI_ABNORM
SCI_STATE
SEAICEPERCENT
SNOWCOVERPERCENT
SP_ENDING_ROW
SP_STARTING_PATH
SP_STARTING_ROW
STATION_ID
SUN_AZIMUTH_ANGLE
SUN_ELEVATION_ANGLE
ShadowFoundPct
Snow_IceSurfaceProcessedPct
StartDataDay
SuccessCloudOptPropRtrPct_VIS
SuccessCloudPhaseRtrPct_IR
SuccessCloudTopPropRtrPct_IR

SuccessfulRetrievalPct
SuccessfulRetrievalPct_IR
SuccessfulRetrievalPct_Land
SuccessfulRetrievalPct_NIR
SuccessfulRetrievalPct_Ocean
SunglintProcessedPct
ThickCloudDetectedPct_IR
ThinCirrusIR_FoundPct
ThinCirrusSolarFoundPct
UncertainConfidentClearPct
VerCOCCO_Tables
VerCarder_params
VerClark_params
VerEmissivity
VerHoge_params
VerIpar_prms
VerMET
VerMOD02
VerMOD03
VerMOD35
VerModis_aer
VerModis_aerosol
VerModis_dob
VerModis_f0
VerModis_lcw
VerModis_rayleigh
VerModis_white
VerModsst_coeffs
VerOZONE
VerParm_CZCS_pigment
VerParm_Eps_78
VerParm_K_490
VerParm_absorp_coef_gelb
VerParm_aer_model1
VerParm_aer_model2
VerParm_arp
VerParm_calcite_conc
VerParm_chlor_MODIS
VerParm_chlor_a_2
VerParm_chlor_a_3
VerParm_chlor_absorb
VerParm_chlor_fluor_base
VerParm_chlor_fluor_effic
VerParm_chlor_fluor_ht

VerParm_cocco_conc_detach
 VerParm_cocco_pigmnt_conc
 VerParm_eps_clr_water
 VerParm_ipar
 VerParm_nLw_412
 VerParm_nLw_443
 VerParm_nLw_488
 VerParm_nLw_531
 VerParm_nLw_551
 VerParm_nLw_667
 VerParm_nLw_678
 VerParm_phycoeryth_conc
 VerParm_phycou_conc
 VerParm_pigment_c1_total
 VerParm_sst
 VerParm_sst4
 VerParm_tot_absorb_1
 VerParm_tot_absorb_2
 VerParm_tot_absorb_3
 VerParm_tot_absorb_4
 VerParm_tot_absorb_5
 VerReynolds
 VerShallow
 VerSpectra
 VeryHighConfidentClearPct
 WRS_SCENE_NO
 WaterCloudDetectedPct_IR
 WaterCloudDetectedPct_VIS
 WaterProcessedPct

AdvertisementType

Description

Type of advertisement (product, provider, or service).

Reference List

Name
AdvertisementMaster

AdvertisementUR

Description

Universal Reference to the server that can execute a service.

Content Source: IOS

Reference List

Name
SignatureServiceAdvertisement

AggregationRelationship

Description

This attribute identifies the relationship between the aggregation attribute and its corresponding value. This relationship may be expressed as boolean operations i.e. '=', '<', '>', 'ne'

Content Source: DP

Constraints: If AggregationType and AggregationValue exist then AggregationRelationship must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
MultipleTypeCollection

Description

'=' - Equal

GT - Greater Than

LT - Less Than

NE - Not Equal

GE - Greater Than or Equal

LE - Less Than or Equal

AggregationType

Description

This attribute will contain the criteria by which multiple type collections have been grouped. It will describe the major categorization which applies to the data therein. Possible collection groupings include: INSTRUMENT, for all collections associated with a given collecting

instrument such as CERES--this is a common aggregation criteria for ECS 'datasets'; PROJECT, for all data associated with a given project that may or may not be related to a single instrument, such as FIRE--this is again a common aggregation criteria for ECS 'datasets'; PARAMETER, for all gran-ules that reflect measurements of a single specific (or related group of specific) geophysical parameters, such as CLOUD PROPERTIES--this is often an aggregation criteria for ECS 'products'; SUPERGRANULE, for collections of granules that a data provider wishes to be orderable as a single related grouping, such as SSM/I TIME SERIES-- this is a concept adopted from MSFC use; EVENT, for a predetermined/tagged set of granules that have been found to be related to a particular geophysical phenomena or event, such as MIDWEST FLOOD '93 or OZONE HOLE or MT. PINATUBO--this is a new ECS concept, also suggested by the University of Virginia Atmospheric researchers.

Content Source: DP

Constraints: If AggregationValue and AggregationRelationship exist then AggregationType must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
MultipleTypeCollection

Description

Instrument

Project

Parameter

Supergranule

Event

Season

Region

AggregationValue

Description

Attribute Description: This attribute contains the value associated with the aggregation type. An example may be EVENT (aggregation type) = MIDWEST FLOOD '93 (aggregation value). MIDWEST FLOOD '93 would be the value associated with the event or aggregation type.

Content Source: DP

Constraints: If AggregationType and AggregationRelationship exist then AggregationValue must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
MultipleTypeCollection

Description

Free Text

AlgorithmPackageAcceptanceDate

Description

This attribute specifies the date that this package version successfully passed AI&T procedures and was accepted as ECS standard algorithm.

Content Source: AI&T

Constraints:

If Delivered Algorithm Package is utilized then AlgorithmPackageAcceptanceDate must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AlgorithmPackage

AlgorithmPackageMaturityCode

Description

This specifies the maturity of the algorithm package as a whole. Maturity code plus version number tells version state.

Content Source: DP

Constraints:

If Delivered Algorithm Package is utilized then AlgorithmPackageMaturityCode must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AlgorithmPackage

Description

pre-launch - preflight development code

PREL - Preliminary. EOS platform is flying development code at best; frequently changing, not stable.

OPL - Operational. Production code, will change, but not frequently; preliminary validation has been done.

stable - code stable and has been fully validated.

final - final version of code, mission is over.

AlgorithmPackageName

Description

This attribute is the name given to the complete delivered package submitted for algorithm integration and test.

Content Source: DP

Constraints:

If Delivered Algorithm Package is utilized then AlgorithmPackageName must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AlgorithmPackage

AlgorithmPackageVersion

Description

This attribute specifies the version of the full package being delivered.

Content Source: DP

Constraints:

If Delivered Algorithm Package is utilized then AlgorithmPackageVersion must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AlgorithmPackage

AltitudeDatumName

Description

The identification given to the level surface taken as the surface of reference from which altitudes are measured.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AltitudeSystemDefinition

Description

Free Text

AltitudeDistanceUnits

Description

Units in which altitudes are recorded.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AltitudeSystemDefinition

Description

meters

feet

millibars - Used to measure pressure levels

theta value - Units used to measure geopotential height

hectoPascals

kilometers

log(hecto Pascals)

AltitudeEncodingMethod

Description

The means used to encode the altitudes.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AltitudeSystemDefinition

Description

Explicit elevation coordinate included with horizontal coordinates

Implicit coordinate

Attribute Values

AltitudeResolution

Description

The minimum distance possible between two adjacent altitude values, expressed in Altitude Distance Units of measure.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AltitudeSystemDefinition

AnalysisLongName

Description

The expanded or long name of the analysis source identified using AnalysisShortName. AnalysisLongName is intended to categorize collections by the processes, which collected (e.g. census survey) or produced them (e.g. NMC 16-level Nested Grid Model).

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AnalysisSource

AnalysisShortName

Description

AnalysisShortName is the unique identifier of the collection or analysis process(s) which best characterize the ECSCollection or Granule. ECSCollections or Granules may be characterized by both a collection and an analysis data set which included data collected using the NWS ASOS network (PlatformType=Network, PlatformShort-Name= ASOS) which was processed using an NMC analysis model (e.g. AnalysisType=Model, AnalysisShortName= RAFS, AnalysisDescription= Regional Area Forecast System, AnalysisTechnique= Regional Optimal Interpolation.)

Content Source: DP (Collection); PGE (Granule)

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AnalysisSource

AnalysisSourceGuidePointer

Description

Logical pointer to the Analysis Source Guide.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AnalysisSourceGuide

AnalysisTechnique

Description

The technique or process used to produce the analysis source. (e.g. 16 layer nested grid model)

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AnalysisSource

AnalysisType

Description

The defined type of analysis source.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AnalysisSource

Description

Standard

Model

Report

Map

Survey

Chart

Publication

AncillaryInputPointer

Description

Data model logical reference to ancillary input data.

Content Source: DSS

Constraints: If ancillary data exists then AncillaryInputPointer exists.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AncillaryInputGranule

AncillaryInputType

Description

This attribute specifies the type of ancillary input granule.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AncillaryInputGranule

Description

Algorithm
Climatology
Geolocation
Instrument
Meteorological

APCollectionShortName

Description

This attribute contains the ShortName of a collection associated with this Algorithm Package.

Content Source: DP

Constraints: If used, APCollectionVersionID is mandatory.

Reference List

Name
AssociatedCollections

APCollectionVersionID

Description

This attribute contains the VersionID of a collection associated with this Algorithm Package.

Content Source: DP

Constraints: If used, APCollectionShortName is mandatory.

Reference List

Name
AssociatedCollections

ArchiveCenter

Description

Center where collection is archived.

Content Source: DAAC

Constraints:

Annotation

Reference: 420-TP-015-001, February 1997

Reference List

Name
ECSCollection

Description

GSFC - Goddard Space Flight Center

LaRC - Langley Research Center

ORNL - Oak Ridge National Laboratory

EDC - EROS Data Center

NSIDC - National Snow and Ice Data Center

JPL - Jet Propulsion Laboratory

CIESIN - Consortium for International Earth Science Information Network

LPDAAC – Land Processing Distributed Active Archive Center

ArchiveCenterGuidePointer

Description

Logical pointer to the Archive Center Guide.

Content Source: DAAC

Reference List

Name
ArchiveCenterGuide

ATBDPointer

Description

Data model reference to the document specification.

Content Source: DSS

Constraints: If ATBD exists then ATBDPointer exists.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ATBD

AuthorAffiliation

Description

The name of an agency or center with which the author of the document works for or is affiliated with.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Author

Description

Free Text

AuthorName

Description

The name of the author of the document.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Author

Description

Free Text

AutomaticQualityFlag

Description

The granule level flag applying generally to the granule and specifically to parameters the granule level. When applied to parameter, the flag refers to the quality of that parameter for the granule

(as applicable). The parameters determining whether the flag is set are defined by the developer and documented in the Quality Flag Explanation.

Content Source: PGE; DP

Constraints: One flag from QAFlags must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAFlags

Description

Passed - The granule (forparameter) has passed a specified automatic test.

Failed - The granule (forparameter) has failed a specified automatic test.

Suspect - May be okay; could not clearly define.

AutomaticQualityFlagExplanation

Description

A text explanation of the criteria used to set automatic quality flag; including thresholds or other criteria.

Content Source:

Reference List

Name
QAFlags

Description

Free Text

BearingReferenceDirection

Description

Direction from which the bearing is measured clockwise.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DistanceandBearingRepresentation

Description

North

South

BearingReferenceMeridian

Description

Axis from which the bearing is measured.

Content Source: DP

Constraints: BearingReferenceMeridian is mandatory if distanceandBearingRepresentation class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DistanceandBearingRepresentation

Description

Assumed

Grid

Magnetic

Astronomic

Geodetic

BearingResolution

Description

The minimum angle measurable between two points, expressed in Bearing Units of measure.

Content Source: DP

Constraints: BearingResolution > 0.0

Constraints: BearingResolution is mandatory if DistanceandBearingRepresentation class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DistanceandBearingRepresentation

BearingUnits

Description

Units of measure used for angles.

Content Source: DP

Constraints: BearingUnits is mandatory if DistanceandBearingRepresentation class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DistanceandBearingRepresentation

Description

Decimal degrees

Decimal minutes

Decimal seconds

Degrees and decimal minutes

Degrees, minutes, and decimal seconds

Radians

Grads

BrowseDescription

Description

Textual description of the Browse granule.

Content Source: DP

Constraints: Must exist if browse produced.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Browse

BrowsePointer

Description

Data model specific logical reference to the browse.

Content Source: DSS

Constraints: If browse product exists then BrowsePointer exists.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Browse

BrowseProductionDateTime

Description

The date and time a Browse was produced.

Reference List

Name
Browse

BrowseSize

Description

Size of Browse Product in MB.

Content Source: DSS

Constraints: assumed that BrowseSize < 1.0 MB

Constraints: BrowseSize > 0.0 MB

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Browse

Description

Free Numerics

CalendarDate

Description

The year (and optionally month, or month and day). This attribute is used to specify a single date covered by a data collection, granule, or event.

Content Source: DP(collection);PGE(granule)

Constraints:

CalendarDate is mandatory if SingleDateTime class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SingleDateTime

CampaignEndDate

Description

The ending date of the campaign.

Content Source: DP (Collection)

Constraints: Must be after campaign start date.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Campaign

CampaignGuidePointer

Description

Logical pointer to the Campaign Guide.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CampaignGuide

CampaignLongName

Description

The expanded name of the campaign/experiment (e.g. Global Climate Observing System).

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Campaign

Description

Active Cavity Radiometer Irradiance Monitor

CampaignShortName**Description**

The unique identifier by which a campaign/project/experiment is known. The campaign/project is the scientific endeavor associated with the acquisition of the collection. Collections may be associated with multiple campaigns.

Content Source: DP (Collection); PGE (Granule)

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Campaign

Description

ACRIM

CampaignStartDate**Description**

The starting date of a campaign/project/experiment.

Content Source: DP (Collection)

Constraints: Must be before campaign end date.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Campaign

CenterLatitude**Description**

Geodetic latitude of center of locality.

Content Source: DP(collection);PGE(granule)

Constraints: West,East,North,South Bounding Coordinate not allowed with center lat/lon

Constraints: CenterLatitude => -90.0

Constraints: CenterLatitude <= +90.0

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Circle

CenterLongitude

Description

Longitude of approximate center of locality.

Content Source: DP(collection);PGE(granule)

Constraints: Not to be used with West,East,North,South Bounding Coordinates. Constraints:

CenterLongitude <= +180.0

Constraints: CenterLongitude => -180.0

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Circle

CitationforExternalPublication

Description

The recommended reference to be used when referring to this collection in publications. Its format is free text, but should include: Originator (the name of an organization or individual that developed the data set, where Editor(s)' names are followed by (ed.) and Compiler(s)' names are followed by (comp.)); Publication date (the date of publication or release of the data set); Title (the name by which document can be referenced).

Content Source: DP

Alias: Edition

Originator

or Publication Date

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SingleTypeCollection

Description

Free Text

City

Description

The city of the person or organization.

Content Source: DP

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactAddress

CollectionDescription

Description

This attribute identifies the major emphasis of the content of the collection. Some examples are: 'cloud top products generated from instrument X', or 'all products containing the parameter sea surface temperature as skin temp'.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CollectionDescriptionClass

Description

Free Text

CollectionState

Description

This attribute describes the state of the collection, whether it is planned but not yet existent, partially complete due to continual additions from remotely sensed data/processing/reprocessing, or is considered a complete product/dataset.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SingleTypeCollection

Description

Completed - All currently planned collection, processing, and reprocessing are complete for this product/ dataset/ collection.

In Work - Data is currently either being collected, processed, or reprocessed for this product/ dataset/ collection.

Planned - Data has not yet been collected or processed for this product/ dataset/ collection, possible candidate for consideration in the collection.

Unknown

None

CollectionType

Description

Type of associated collection being described. Used to describe the 'geneology' of the collection in terms of other collections and supports production history.

Content Source: DP

Constraints: Must exist when Collection Use is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CollectionAssociation

Description

Input - Collection used as input or ancillary to this collection.

Dependent - Collections which use this collection as input, including browse.

Science Associated - Collections with which this collection is associated in science terms.

Elevation- Required for GLAS

Range Corrections

Altimetry Data

GLAS Instrument Data

Sea Ice Data

Ocean Data

CollectionUse

Description

Additional comments for all types of associated collections, such as the importance of the input and its use.

Content Source: DP

Constraints: Must exist when Collection Type is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CollectionAssociation

Description

Free Text

ComponentName

Description

Name of the Component.

Reference List

Name
SSAPComponent

ComponentType

Description

Name of the Component Type.

Reference List

Name
SSAPComponent

ContactFirstName

Description

First name of the individual which the contact role (producer, archiver, distributor, or data originator) applies. People are points of contact, rather than organizations, in cases where the association of the person to the data set is more significant than the association of the organization to the data set. They may also be included if both a single person and organization are provided as points of contact.

Content Source: DP

Alias: Contact Person Primary

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactPerson

ContactInstructions

Description

Supplemental instructions on how or when to contact the individual or organization.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Contact

Description

Free Text

ContactJobPosition

Description

The title of the individual, i.e. Team Leader, Principal Investigator.

Content Source: DP; DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactPerson

Description

Free Text

ContactLastName

Description

Last name of the individual which the contact role (producer, archiver, distributor, or data originator) applies. People are points of contact, rather than organizations, in cases where the association of the person to the data set is more significant than the association of the organization to the data set. They may also be included if both a single person and organization are provided as points of contact.

Content Source: DP

Alias: Contact Person Primary
Contact Person

Constraints:

Mandatory if applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactPerson

ContactMiddleName

Description

Middle name of the individual which the contact role (producer, archiver, distributor, or data originator) applies. People are points of contact, rather than organizations, in cases where the association of the person to the data set is more significant than the association of the organization to the data set. They may also be included if both a single person and organization are provided as points of contact.

Content Source: DP

Alias: Contact Person Primary
Contact Person

Constraints:

Mandatory if applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactPerson

ContactOrganizationName

Description

The organization and the member of the organization, associated with the data set. Used in cases where the association of the organization to the data set is more significant than the association of the person to the data set.

Content Source: DP

Alias: Contact Organization
Contact Organization Primary

Constraints:

Mandatory if applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactOrganization

Country

Description

The country of the address.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997.

Standard: ISO 3166 Maintenance Agency (<ftp://ftp.ripe.net/iso3166-countrycodes>) 3-letter code

Reference List

Name
ContactAddress

Description

AFG - Afghanistan
ALB - Albania
DZA - Algeria
ASM - American Samoa
AND - Andorra
AGO - Angola
AIA - Anguilla
ATA - Antarctica
ATG - Antigua And Barbuda
ARG - Argentina
ARM - Armenia
ABW - Aruba
AUS - Australia
AUT - Austria
AZE - Azerbaijan
BHS - Bahamas
BHR - Bahrain
BGD - Bangladesh
BRB - Barbados

BLR - Belarus
BEL - Belgium
BLZ - Belize
BEN - Benin
BMU - Bermuda
BTN - Bhutan
BOL - Bolivia
BIH - Bosnia And Herzegowina
BWA - Botswana
BVT - Bouvet Island
BRA - Brazil
IOT - British Indian Ocean Territory
BRN - Brunei Darussalam
BGR - Bulgaria
BFA - Burkina Faso
BDI - Burundi
KHM - Cambodia
CMR - Cameroon
CAN - Canada
CPV - Cape Verde
CYM - Cayman Islands
CAF - Central African Republic
TCD - Chad
CHL - Chile
CHN - China
CXR - Christmas Island
CCK - Cocos (Keeling) Islands
COL - Colombia
COM - Comoros
COG - Congo
COK - Cook Islands
CRI - Costa Rica
CIV - Cote D'ivoire
HRV - Croatia (Local Name: Hrvatska)
CUB - Cuba
CYP - Cyprus
CZE - Czech Republic
DNK - Denmark
DJI - Djibouti
DMA - Dominica
DOM - Dominican Republic
TMP - East Timor
ECU - Ecuador
EGY - Egypt

SLV - El Salvador
GNQ - Equatorial Guinea
ERI - Eritrea
EST - Estonia
ETH - Ethiopia
FLK - Falkland Islands (Malvinas)
FRO - Faroe Islands
FJI - Fiji
FIN - Finland
FRA - France
FXX - France, Metropolitan
GUF - French Guiana
PYF - French Polynesia
ATF - French Southern Territories
GAB - Gabon
GMB - Gambia
GEO - Georgia
DEU - Germany
GHA - Ghana
GIB - Gibraltar
GRC - Greece
GRL - Greenland
GRD - Grenada
GLP - Guadeloupe
GUM - Guam
GTM - Guatemala
GIN - Guinea
GNB - Guinea-Bissau
GUY - Guyana
HTI - Haiti
HMD - Heard And Mc Donald Islands
VAT - Holy See (Vatican City State)
HND - Honduras
HKG - Hong Kong
HUN - Hungary
ISL - Iceland
IND - India
IDN - Indonesia
IRN - Iran (Islamic Republic Of)
IRQ - Iraq
IRL - Ireland
ISR - Israel
ITA - Italy
JAM - Jamaica

JPN - Japan
JOR - Jordan
KAZ - Kazakhstan
KEN - Kenya
KIR - Kiribati
PRK - Korea, Democratic People's Republic Of
KOR - Korea, Republic Of
KWT - Kuwait
KGZ - Kyrgyzstan
LAO - Lao People's Democratic Republic
LVA - Latvia
LBN - Lebanon
LSO - Lesotho
LBR - Liberia
LBY - Libyan Arab Jamahiriya
LIE - Liechtenstein
LTU - Lithuania
LUX - Luxembourg
MAC - Macau
MKD - Macedonia, The Former Yugoslav Republic Of
MDG - Madagascar
MWI - Malawi
MYS - Malaysia
MDV - Maldives
MLI - Mali
MLT - Malta
MHL - Marshall Islands
MTQ - Martinique
MRT - Mauritania
MUS - Mauritius
MYT - Mayotte
MEX - Mexico
FSM - Micronesia, Federated States Of
MDA - Moldova, Republic Of
MCO - Monaco
MNG - Mongolia
MSR - Montserrat
MAR - Morocco
MOZ - Mozambique
MMR - Myanmar
NAM - Namibia
NRU - Nauru
NPL - Nepal
NLD - Netherlands

ANT - Netherlands Antilles
NCL - New Caledonia
NZL - New Zealand
NIC - Nicaragua
NER - Niger
NGA - Nigeria
NIU - Niue
NFK - Norfolk Island
MNP - Northern Mariana Islands
NOR - Norway
OMN - Oman
PAK - Pakistan
PLW - Palau
PAN - Panama
PNG - Papua New Guinea
PRY - Paraguay
PER - Peru
PHL - Philippines
PCN - Pitcairn
POL - Poland
PRT - Portugal
PRI - Puerto Rico
QAT - Qatar
REU - Reunion
ROM - Romania
RUS - Russian Federation
RWA - Rwanda
KNA - Saint Kitts And Nevis
LCA - Saint Lucia
VCT - Saint Vincent And The Grenadines
WSM - Samoa
SMR - San Marino
STP - Sao Tome And Principe
SAU - Saudi Arabia
SEN - Senegal
SYC - Seychelles
SLE - Sierra Leone
SGP - Singapore
SVK - Slovakia (Slovak Republic)
SVN - Slovenia
SLB - Solomon Islands
SOM - Somalia
ZAF - South Africa
SGS - South Georgia And The South Sandwich Islands

ESP - Spain
LKA - Sri Lanka
SHN - St. Helena
SPM - St. Pierre And Miquelon
SDN - Sudan
SUR - Suriname
SJM - Svalbard And Jan Mayen Islands
SWZ - Swaziland
SWE - Sweden
CHE - Switzerland
SYR - Syrian Arab Republic
TWN - Taiwan, Province Of China
TJK - Tajikistan
TZA - Tanzania, United Republic Of
THA - Thailand
TGO - Togo
TKL - Tokelau
TON - Tonga
TTO - Trinidad And Tobago
TUN - Tunisia
TUR - Turkey
TKM - Turkmenistan
TCA - Turks And Caicos Islands
TUV - Tuvalu
UGA - Uganda
UKR - Ukraine
ARE - United Arab Emirates
GBR - United Kingdom
USA - United States
UMI - United States Minor Outlying Islands
URY - Uruguay
UZB - Uzbekistan
VUT - Vanuatu
VEN - Venezuela
VNM - Viet Nam
VGB - Virgin Islands (British)
VIR - Virgin Islands (U.S.)
WLF - Wallis And Futuna Islands
ESH - Western Sahara
YEM - Yemen
YUG - Yugoslavia
ZAR - Zaire
ZMB - Zambia
ZWE - Zimbabwe

CSDTComments

Description

A free text field for the user to add comments clarifying the data structure.

Content Source:

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CSDTDescription

DAACName

Description

The name of the Distributed Active Archive Center that is responsible for the production plan.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

Description

GSFC - Goddard Space Flight Center

LaRC - Langley Research Center

ORNL - Oak Ridge National Laboratory

EDC - EROS Data Center

NSIDC - National Snow and Ice Data Center

JPL - Jet Propulsion Laboratory

CIESIN - Consortium for International Earth Science Information Network

SAR - Alaska SAR Facility

DAPID

Description

The unique identifier for the Delivered Algorithm Package.

Content Source: DSS

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS)
Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
DAP

DAPInsertDate

Description

The date the Delivered Algorithm Package was inserted into the system.

Content Source: DSS

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS)
Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
DAP

DAPPGENAME

Description

The name of the PGE.

Content Source: DSS

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
PGEGroups

DAPPGVersion

Description

The version of the PGE.

Content Source: DSS

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
PGEGroups

DAPSWVersion

Description

The Software Version of the PGE.

Content Source: DSS

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
PGEGroups

DataCenter

Description

The data center is supporting the information for which the guide is applicable.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Guide

DatasetDisclaimerPointer

Description

This attribute is used to provide hypertext links information. As an order is placed for a specific product, the corresponding data set disclaimer message will be presented to the user. The user is required to acknowledge that he or she understands and agrees with the disclaimer before a product order can proceed. As the data set is distributed to the user, the metadata file (.met file) that accompanies the distribution will include, in addition to the product information, the user's guide (ECSCollectionGuide), the miscellaneous information (MiscellaneousInformation), and the disclaimer, if available for the data set.

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
ECSCollection

DateofReferencePaperPublication

Description

Contains the date of formal/informal publication of the reference paper.

Content Source: DP

Constraints: if reference papers utilized, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ReferencePaper

DateType

Description

This attribute specifies the type of date represented by the value in the date attributes of the temporal subclasses.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Temporal

Description

Julian - (JD)- the internal of time in days and fraction of day since 4713 B.C. January 1, Greenwich noon, Julian proleptic calendar.

Gregorian - Standard calendar dates using B.C., A.D. year, and January 1 through December 31 month and day delineation.

J2000

DayNightFlag

Description

This attribute is used to identify if a granule was collected during the day, night (between sunset and sunrise) or both.

Content Source: PGE

Alias: NA

Constraints: TBD

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

Description

Day - between sunrise and sunset

Night - between sunset and sunrise

Both - Includes both 'Day' and 'Night'

NA

D - Day (between sunrise and sunset)

N - Night (between sunset and sunrise)

DeliveryPurpose

Description

This attribute describes the purpose of the delivery e.g., an initial release, modification, etc.

Content Source: DP

Constraints:

If Delivered Algorithm Package is utilized then DeliveryPurpose must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AlgorithmPackage

Description

Initial Delivery

Early Delivery

ENGRG MOD - Engineering Modification

Operational

Enhancement

SW Patch

DenominatorofFlatteningRatio

Description

The ratios of the Earth's major axis to the difference between the major and the minor.

Content Source: DP

Constraints: DenominatorofFlatteningRatio > 0.0

Constraints: DenominatorofFlatteningRatio is mandatory if GeodeticModel class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeodeticModel

DepthDatumName

Description

The identification given to surface of reference from which depths are measured.

Content Source: DP

Constraints: DepthDatumName is mandatory if DepthSystemDefinition class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DepthSystemDefinition

Description

Approximate lowest astronomical tide

Chart datum; datum for sounding reduction

Columbia River datum

Equatorial springs low water

Gulf Coast low water datum

High-water full and charge

High water

Higher high water

Highest astronomical tide

Indian spring low water

Land survey datum

Local Surface
 Low-water full and charge
 Low water
 Low water datum
 Lower low water
 Lowest astronomical tide
 Lowest low water
 Lowest normal low water
 Mean high water (MHW)
 Mean high water neap
 Mean high water springs
 Mean higher high water
 Mean higher low water
 Mean low water (MLW)
 Mean low water neap
 Mean low water springs
 Mean lower high water
 Mean lower low water
 Mean lower low water springs
 Mean sea level (MSL)
 Mean tide level
 Neap tide
 No correction
 Spring tide
 Tropic lower low water

DepthDistanceUnits

Description

Units in which depths are recorded.

Content Source: DP

Constraints: DepthDistanceUnits are mandatory if DepthSystemDefinition class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DepthSystemDefinition

Description

fathoms
feet
meters

DepthEncodingMethod

Description

The means used to encode depths.

Content Source: DP

Constraints: DepthEncodingMethod is mandatory if DepthSystemDefinition class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DepthSystemDefinition

Description

Attribute Values

Explicit depth coordinate included with horizontal coordinates

Implicit coordinate

DepthResolution

Description

The minimum distance possible between two adjacent depth values, expressed in depth distance units of measure.

Content Source: DP

Constraints: DepthResolution > 0.0

Constraints: DepthResolution is mandatory if DepthSystemDefinition class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DepthSystemDefinition

Description

Description

Description of the Advertisement.

Reference List

Name
AdvertisementDescription

DescriptionType

Description

Contains the type of algorithm description.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
AlgorithmDescription

Description

System Description

Processing File Description

ATBD

Test Plan

Operations Manual

SW Development Standard

Programmers Guide

Detailed Design

Performance Test Results

DetailedDesignPointer

Description

Data model logical reference to detailed design document.

Content Source: DSS

Constraints: If Detailed Design Document exist then DetailedDesignPointer must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DetailedDesign

DistanceResolution

Description

The minimum distance measurable between two points, expressed in Planar Distance Units of measure.

Content Source: DP

Constraints: DistanceResolution > 0.0

Constraints: DistanceResolution is mandatory if DistanceandBearingRepresentation class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
DistanceandBearingRepresentation

DocumentCreated

Description

The date on which the document was created.

Content Source: DP

Constraints: mandatory for all documents

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Document

DocumentUpdated

Description

The date on which the document was last revised or updated.

Content Source: DP

Constraints: mandatory for all documents

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Document

DocumentVersion

Description

The version or revision level of the document.

Content Source: DP

Constraints: mandatory for all documents

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Document

EastBoundingCoordinate

Description

Eastern-most limit of coverage expressed in longitude.

Content Source: DP(collection);PGE(granule)

Constraints: EastBoundingCoordinate not null for collection only.

Constraints: EastBoundingCoordinate => -180.0

Constraints: EastBoundingCoordinate <= +180.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
BoundingBoxRectangle

ECSCollectionGuidePointer

Description

This attribute provides the URL of the user's guide document that describes the data set.
Content Source: DAAC, DP

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS)
Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
ECSCollectionGuide

ECSCollectionGuidePointerComment

Description

This attribute is used to provide the text displayed on the client for the
ECSCollectionGuidePointer.

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS)
Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
ECSCollectionGuide

ECSDisciplineKeyword

Description

Keyword used to describe the general discipline area of the collection. A collection can conceivably cover several disciplines.

Content Source: DP

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDiscipline

Description

Earth Science

ECSParameterKeyword

Description

Keyword used to describe specific characteristics of a collection at a higher level of detail than provided by ECSVariableKeyword.

Content Source: DP

Alias: NA

Constraints: Controlled keyword

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSParameter

Description

Absorbed radiation by phytoplankton (ARP)
Aerosol Backscatter Cross Section Profile
Aerosol Extinction Cross Section ProfileAerosol model
Aerosol extinction profiles at 12.1 microns (AERO12P1)
Aerosol extinction profiles at 1257 cm-1 (AERO1257)
Aerosol extinction profiles at 1605 cm-1 (AERO1605)
Aerosol extinction profiles at 1897 cm-1 (AERO1897)
Aerosol extinction profiles at 2.45 microns (AEXTHF)
Aerosol extinction profiles at 2.80 microns (AEXTCO2)
Aerosol extinction profiles at 3.40 microns (AEXTHCL)
Aerosol extinction profiles at 3.46 microns (AEXTCH4)
Aerosol extinction profiles at 5.26 microns (AEXTNO)
Aerosol extinction profiles at 6.23 microns (AERO6P23)
Aerosol extinction profiles at 780 cm-1 (AERO780)

Aerosol extinction profiles at 790 cm⁻¹ (AERO790)
Aerosol extinction profiles at 843 cm⁻¹ (AERO843)
Aerosol extinction profiles at 880 cm⁻¹ (AERO880)
Aerosol extinction profiles at 925 cm⁻¹ (AERO925)
Aerosol Optical Depth
Aerosol Optical Thickness
Aerosol optical thickness at 865 nm (Tau 865)
Aerosol radiance at 765 nm
Aerosol radiance ratio (Clear water epsilon 531nm/667nm)
Aerosol radiance ratio (Epsilon 765nm/865nm)
Aerosol Reflectance
Aerosol Type
Albedo
Altitude profiles
Angstrom Coefficient
Angstrom coefficient, 520 to 865 nm
Asymmetry Factor
Atmospheric pressure profiles
Atmospheric temperature profiles (TEMP)
Atmospheric temperature profiles on a pressure grid (TEMP_P)
Atmospheric temperature profiles on an altitude grid (TEMP_A)
Atmospheric temperature profiles
Backscattering Ratio
Bidirectional Reflectance
Calcite
Calcium Carbonate
Canopy Density
Carbon Export
Carbon monoxide volume mixing ratio profiles (CO)
Chlorine monoxide volume mixing ratio profiles (CLO)
Chlorine nitrate volume mixing ratio profiles (CLONO2)
Chlorophyll a concentration
Chlorophyll absorption coefficient at 675 nm
Chlorophyll pigment corrected for the presence of coccoliths
Chlorophyll fluorescence baseline
Chlorophyll fluorescence efficiency
Chlorophyll fluorescence line height
Cirrus Reflectance
Cloud Backscatter Cross Section Profile
Cloud Extinction Cross Section Profile
Cloud Fraction
Cloud Ice Path
Cloud Layer Heights
Cloud Liquid Water Path

Cloud Optical Depth
 Cloud Particle Effective Radius
 Cloud Presence
 Cloud Shadow
 Cloud Water Path
 Conditional Rain Rate
 Contour Line
 CFC-11 or trichlorofluoromethane volume mixing ratio profiles (CFCL3)
 CFC-12 or dichlorodifluoromethane volume mixing ratio profiles (CF2CL2)
 CZCS total pigment concentration
 Daytime Brightness Temperature from Mid-IR Bands
 Daytime Brightness Temperature from Thermal Bands
 Daytime Infrared Radiance from Mid-IR Bands
 Daytime Infrared Radiance from Thermal Bands
 Daytime SST from MODIS bands 22 and 23 (Mid IR)
 Daytime SST from MODIS bands 31 and 32 (Thermal IR)
 DEM
 Detached coccolith concentration
 Diffuse Attenuation Coefficients
 Diffuse attenuation coefficient at 490 nm (K490)
 Digital Contours
 Digital Mapping
 Digital Terrain Elevation Data
 Digital Terrain Model
 Dinitrogen pentoxide volume mixing ratio profiles (N2O5)
 Dinitrogen pentoxide volume mixing ratio profiles (N2O5_OTHER)
 Dissolved Organic Matter
 Dissolved organic matter absorption at 400 nm (gelbstoff)
 Effective Optical Depth
 Effective Radius
 Electron differential number flux (intensity) profiles
 Electron energy deposition profiles (EDEP3AT_ELEC)
 Electron energy deposition profiles from the HEPS instrument (HEPS_ELEC_ED)
 Electron energy deposition profiles from the MEPS instrument (MEPS_ELEC_ED)
 Elevation Data
 Elevation Distribution
 Epsilon of aerosol correction at 670 and 865 nm
 Fire Characteristics
 Fire Intensity
 Fire Temperature
 Gelbstoff
 Geopotential height profiles (GPH)
 Geopotential height profiles
 Glint radiance

GPS (Global Positioning System)
 Hydrogen chloride volume mixing ratio profiles (HCL)
 Hydrogen fluoride volume mixing ratio profiles (HF)
 Ice Sheet Range
 Infrared
 Instantaneous photosynthetically available radiation (IPAR)
 Integral chlorophyll, calculated using the Level-2 values chlorophyll a divided by K_490
 Land Cover Change
 Land Range
 Laser Reflectance
 Latent Heat
 LIDAR Profile
 Low Level
 LPA (Laser Pulse Array)
 Mass Concentration
 Meridional wind component profiles on a pressure grid (MERWIN_P)
 Meridional wind component profiles on an altitude grid (MERWIN_A)
 Meridional wind component profiles
 Methane volume mixing ratio profiles (CH4)
 Methyl cyanide volume mixing ratio profiles (CH3CN)
 Mixed Layer Depth
 MODIS chlorophyll-a pigment concentration
 MODIS chlorophyll-a pigment concentration (3 band)
 MODIS total pigment concentration
 Near Infrared
 New Nitrogen Production
 Nighttime Brightness Temperature from Mid-IR Bands
 Nighttime Brightness Temperature from Thermal Bands
 Nighttime Infrared Radiance from Mid-IR Bands
 Nighttime Infrared Radiance from Thermal Bands
 Nighttime SST from MODIS bands 22 and 23 (Mid IR)
 Nighttime SST from MODIS bands 31 and 32 (Thermal IR)
 Nitric acid volume mixing ratio profiles (HNO3)
 Nitric oxide volume mixing ratio profiles (NO)
 Nitrogen dioxide volume mixing ratio profiles (NO2)
 Nitrogen Trioxide
 Nitrous oxide volume mixing ratio profiles (N2O)
 Normalized water-leaving radiance at 412 nm
 Normalized water-leaving radiance at 443 nm
 Normalized water-leaving radiance at 488 nm
 Normalized water-leaving radiance at 490 nm
 Normalized water-leaving radiance at 520 nm
 Normalized water-leaving radiance at 531 nm
 Normalized water-leaving radiance at 551 nm

Normalized water-leaving radiance at 565 nm
 Normalized water-leaving radiance at 667 nm
 Normalized water-leaving radiance at 670 nm
 Normalized water-leaving radiance at 678 nm
 O2 band volume emission rate profiles on a pressure grid (VOLER_P)
 O2 band volume emission rate profiles on an altitude grid (VOLER_A)
 Ocean Range
 Optical Depth
 Ozone volume mixing ratio profiles (O3)
 Ozone volume mixing ratio profiles at 183 GHz (O3_183)
 Ozone volume mixing ratio profiles at 205 GHz (O3_205)
 Ozone volume mixing ratio profiles at 780 cm-1 (O3B9)
 Photosynthetically Available Radiation (PAR)
 Phycoerythrobilin
 Phycoerythrobilin-rich phycoerythrin concentration (PEB)
 Phycourobilin
 Phycourobilin-rich phycoerythrin concentration (PUB)
 Planetary Boundary Layer Height
 Planetary Boundary Layer Optical Depth
 Primary Production
 Proton energy deposition profiles (EDEP3AT_PROT)
 Proton energy deposition profiles from the HEPS instrument (HEPS_PROT_ED)
 Proton energy deposition profiles from the MEPS instrument (MEPS_PROT_ED)
 Radiance @ 0.63um
 Radiance @ 1.6um
 Radiance @ 10.8um
 Radiance @ 12.0um
 Radiance @ 3.75um
 Rain Probability
 Range
 Rayleigh radiance
 Reflectance
 Reflected Flux
 Relative humidity (moisture) profiles
 Roughness
 Satellite azimuth
 Satellite Local Zenith Angle
 Satellite zenith
 Sea Ice Range
 SeaWiFS chlorophyll-a pigment concentration
 SeaWiFS chlorophyll-a pigment concentration (2 band)
 Shadow Mask
 Slope
 Solar azimuth

Solar zenith
SRS (Stellar Reference System)
ST (Star Tracker)
Sulfur dioxide volume mixing ratio profiles (SO₂)
Surface Albedo
Surface Elevation
Surface Emissivity
Surface Reflectance
Surface Roughness
Surface Slope
Temperature
Texture Indices
Total absorption coefficient at 412 nm
Total absorption coefficient at 443 nm
Total absorption coefficient at 488 nm
Total absorption coefficient at 531 nm
Total absorption coefficient at 551 nm
Total Column
Transmitted Flux
Upper Level
Upper tropospheric relative humidity with respect to ice profiles (UTH)
U wind component
V wind component
Vegetation Cover Change
Vertical Profile
Vertical velocity (omega) profiles
Visible
Voltage
Water vapor volume mixing ratio profiles (H₂O)
Waveform
Whitecap radiance
Wind Speed
X-ray energy deposition profiles (EDEP3AT_P[01-16])
Zonal wind component profiles on a pressure grid (ZONWIN_P)
Zonal wind component profiles on an altitude grid (ZONWIN_A)
Zonal wind component profiles
532nm Attenuated Backscatter
1064nm Attenuated Backscatter
 $2.0 * TB(19V) - TB(21V)$

ECSTermKeyword

Description

Keyword used to describe the science parameter area of the collection. A collection can conceivably cover many such parameters.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSTerm

Description

Aerosols
Air Quality
Altitude
Aquatic Habitat
Atmospheric Backscatter
Atmospheric Chemistry
Atmospheric Phenomena
Atmospheric Pressure
Atmospheric Radiation
Atmospheric Temperature
Atmospheric Water Vapor
Atmospheric Winds
Attitudes, Preferences, Behavior
Bathymetry
Boundaries
Boundary Layer
Clouds
Coastal Processes
Ecological Dynamics
Economic Resources
Engineering/Sensor Quantities
Environmental Effects
Environmental Impacts
Erosion/Sedimentation
Food Resources
Fungi

Gamma Ray
Geochemistry
Geodetics/Gravity
Geologic Time
Geomagnetism
Geophysical Fields
Geothermal
Glaciers/Ice Sheets
Ground Water
Habitat Conversion/Fragmentation
Human Health
Ice Core Records
Ice Sheet
Infrared Wavelengths
Infrastructure
Ionosphere/Magnetosphere Particles
Land Records
Land Slope
Land Temperature
Land Use/Land Cover
Landscape
Marine Geophysics
Marine Sediments
Microbiota
Microbiota Taxonomy
Microwave
Natural Hazards
Natural Resources
Ocean Acoustics
Ocean Chemistry
Ocean Circulation
Ocean Heat Budget
Ocean Optics
Ocean Pressure
Ocean Temperature
Ocean Water Budget
Ocean Waves
Ocean Winds
Ocean/Lake Records
Platform Characteristics
Planetary Boundary Layer
Plant Taxonomy
Population
Precipitation

Radar
Radiation Budget
Radiative Properties
Radio Wave
Rocks/Minerals
Salinity/Density
Sea Ice
Sea Surface
Sea Surface Height
Seismology
Sensor Characteristics
Snow/Ice
Soils
Solar Activity
Solar Energetic Particles
Surface Radiative Properties
Surface Water
Tectonics
Temperature
Terrestrial Habitat
Tides
Topography
Transmission
Ultraviolet Wavelengths
Vegetation
Viewing Geometry
Visible Wavelengths
Volcanoes
Water Quality
Wetlands
X-Ray
Zoology

ECSTopicKeyword

Description

Keyword used to describe the general topic area of the collection. A collection can conceivably cover several topics.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSTopic

Description

Atmosphere
Biosphere
Cryosphere
Human Dimensions
Hydrosphere
Land Surface

Oceans
Paleoclimate
Radiance or Imagery
Solar Physics

Solar-terrestrial Interactions
Solid Earth

ECSVariableKeyword

Description

Keyword used to describe the specific science parameter content of the collection. A collection can conceivably cover many specific parameters. The keyword valids are the lowest level physical parameter terms which are normally searched by a user; i.e. a user enters a keyword which when found may connect with one or more parameters from collections. The keywords are also the lowest level words, which describe product content without being the server specific measurement (held in Parameter class). While there is a controlled list of these parameters held by GCMD, additions can be made by an as yet unspecified configuration control process.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSVariable

Description

Ablation
Absorption
Abyssal Hills/Plains

Acid Deposition
Acid Rain
Acoustic Attenuation
Acoustic Frequency
Acoustic Reflectivity
Acoustic Scattering
Acoustic Tomography
Acoustic Velocity
Adaptation
Administrative Divisions
Advection
Aerosol Backscatter
Aerosol Extinction
Aerosol Layer Heights
Aerosol Optical Depth/Thickness
Aerosol Particle Properties
Aerosol Radiance
Afforestation/Reforestation
Age Determinations
Agricultural Expansion
Agricultural Land
Agriculture
Aurora
Air Temperature
Albedo
Algae
Alkalinity
Alpha Particles
Alpine/Tundra
Altitude
Ambient Noise
Ammonia
Amoebae
Amphibians
Anatomical Parameters
Anemones
Anisotropy
Anisotropy
Antenna Temperature
Anticyclones/Cyclones
Aphotic Zone
Aquaculture
Aquifer Recharge
Aquifers

Arachnids
Arthropods
Atmospheric Emitted Radiation
Atmospheric Heating
Atmospheric Pressure
Atmospheric Stability
Atmospheric Winds
Attitude Characteristics
Attenuated Backscatter
Attenuation/Transmission
Avalanche
Bacteria
Baroclinic Mode
Barometric Altitude
Barotropic Mode
Barrier Islands
Beaches
Bedrock Lithology
Benthic Habitat
Benthic Heat Flow
Benthic Index
Bioaccumulation
Bioavailability
Biogeochemical Cycles
Bioluminescence
Biomass
Biomass Burning
Biomedical Chemicals
Bioturbation
Birds
Blue-Green Algae
Boundary Layer Temperature
Bowen Ratio
Brightness Temperature
Brine Production
Bromine Monoxide
Buildings
Buoy Position
Cambrian
Canopy Characteristics
Carbon
Carbon Dioxide
Carbon Monoxide
Chlorine Nitrate

Carbonaceous Aerosols
Carbonate
Carbonate Sediments
Carboniferous
Carcinogens
Cave Deposits
Caves
Cenozoic
Centipedes
Chemical Weathering
Chemosynthesis
Chlorine Dioxide
Chlorine Monoxide
Chlorofluorocarbons
Chlorophyll
Ciliates
Cloud Amount
Cloud Amount/Frequency
Cloud Asymmetry
Cloud Ceiling
Cloud Cleared Radiance
Cloud Condensation Nuclei
Cloud Emissivity
Cloud Forcing
Cloud Height
Cloud Ice
Cloud Liquid Water
Cloud Liquid Water/Ice
Cloud Optical Depth/Thickness
Cloud Optical Thickness
Cloud Precipitable Water
Cloud Reflectance
Cloud Top Pressure
Cloud Top Temperature
Cloud Types
Cloud Vertical Distribution
Coal
Coastal Elevation
Coastal Habitat
Coccolithophores
Communications
Community Structure
Competition
Condensation

Conduction
Conductivity
Conifers
Consumer Behavior
Consumption
Contaminants
Continental Drift
Continental Rises/Slopes
Continental Shelves
Continental Tectonics
Contours
Control Surveys
Convection
Convergence/Divergence
Coral Deposits
Coral Reefs
Corals
Core Processes
Corona Holes
Coronal Properties
Cosmic Rays
Cretaceous
Crops
Crown
Crustaceans
Crustal Motion
Crystals
Cultural Features
Cyclones
Deciduous Vegetation
Decomposition
Deforestation
Degradation
Degree Days
Deiced Temperature
Deltas
Dendrifcation Rate
Density
Depth Hoar
Desalinization
Desert
Desertification
Devonian
Dew Point

Diagenesis
Diatoms
Differential Flux
Differential Pressure
Diffusion
Dimethyl Sulfide
Dinitrogen Pentoxide
Discharge/Flow
Diseases
Dispersion
Dissolved Gases
Dissolved Solids
Diurnal Movements
Divergence
Dome Temperature
Domesticated Animals
Domesticated Plants
Dominance
Dominant Species
Doppler Speed
Downwelling
Drainage
Droplet Concentration/Size
Droplet Size
Drought
Dunes
Dust/Ash
Earthquake Dynamics
Earthquake Occurrences
Earthquake Predictions
Echinoderms
Eddies
Electric Field
Electrical Properties
Electricity
Electron Flux
Elevation Distribution
Emissions
Emissivity
Endangered Species
Energetic Particles
Energy Deposition
Entrainment
Eocene

Erosion
Eruption Dynamics
Estuaries
Estuarine Habitat
Estuarine Wetlands
Eutrophication
Evaporation
Evaporites
Evapotranspiration
Excretion
Exotic Species
Exotic Vegetation
Extinction
Extinction Coefficients
Faults
Feeding Habitat
Ferns
Fetch
Filaments
Fires
Fire Characteristics
Fire Occurrence
Fish
Fixation
Fjords
Flagellates
Flatworms
Floods
Fluorescence
Fog
Folds
Food-web Dynamics
Food Production
Foraminifers
Forest Composition/ Structure
Forest Habitat
Formaldehyde
Fossil Fuel Burning
Fracture Zones
Freeze
Freeze/Thaw
Freezing Rain
Fresh Water Flux
Fronts

Frost
Gamma Ray
Gas Flaring
Gelbstoff
Geomagnetic Forecasts
Geomagnetic Indices
Geomagnetic Induction
Geopotential Height
Geothermal Energy
Geothermal Temperature
Glaciation
Glaciers
Glacier Elevation/Ice Sheet Elevation
Grassland
Gravity
Gravity Field
Gravity Wave
Ground Height
Groundwater Chemistry
Groundwater Quality
Guyots
Gyres
Hail
Halocarbons
Halocline
Heat Flux
Heating Rate
Heavy Ions
Heavy Metals
Herbivory
Holocene
Humidity
Hurricanes
Hydration
Hydraulic Conductivity
Hydrocarbons
Hydrochlorofluorocarbons
Hydrofluorocarbons
Hydrogen Chloride
Hydrogen Cyanide
Hydrogen Fluoride
Hydrogenous Sediments
Hydropattern
Hydroperiod

Hydroperoxy
Hydrostatic Pressure
Hydrothermal Vents
Hydroxyl
Hypochlorous Acid
Ice Age
Ice Compactness
Ice Concentration
Ice Core Air Bubbles
Ice Deformation
Ice Depth/Thickness
Ice Drift
Ice Edges
Ice Extent
Ice Floes
Ice Growth/Melt
Ice Motion
Ice Pack
Ice Roughness
Ice Sheet Elevation
Ice Sheet Reflectance
Ice Sheets
Ice Sheet Slope
Ice Temperature
Ice Types
Ice Velocity
Icebergs
Igneous Rocks
Importance Value
Incoming Shortwave Radiation
Incoming Solar Radiation
Indigenous Species
Indigenous Vegetation
Industrial Emissions
Industrialization
Infiltration
Infrared Flux
Infrared Imagery
Infrared Radiance
Infrared Radiation
Inlets
Inorganic Carbon
Inorganic Matter
Insects

Instability
Internal Waves
Intertidal Zone
Inundation
Inversion Height
Invertebrates
Ion Exchange
Ions
Irradiance
Irrigation
Island Arcs
Islands
Isostatic Rebound
Isotopes
Jellyfish
Jurassic
Kinetic Energy
Lacustrine Wetlands
Lagoons
Lake Ice
Lake Levels
Lakes
Land Classes
Land Cover
Land Heat Capacity
Land Management
Land Productivity
Land Resources
Land Slope
Land Subsidence
Land Surface Temperature
Land Tenure
Landforms
Landscape Ecology
Landscape Management
Landscape Pattern
Landslides
Lava
Lead
Leads
Leaf Characteristics
Lichens
Life History
Light Attenuation

Light Transmission
Lightning
Liquid Water Equivalent
Litter Characteristics
Local Subsidence Trends
Loess
Longshore Currents
Longwave Radiation
Macroalgae
Macrofossils
Macrophyte
Magma
Magnetic Anomalies
Magnetic Declination
Magnetic Field
Magnetic Inclination
Magnetic Intensity
Mammals
Mangroves
Marine
Marine Gravity Field
Marine Magnetism
Marshes
Maximum/Minimum Temperature
Mesoscale Convective Complex
Mesozoic
Metals
Metamorphic Rocks
Methane
Methane Burden
Methyl Cyanide
Meteorites
Microalgae
Microfossils
Microphytes
Microwave Imagery
Microwave Radiance
Mid-Ocean Ridges
Migratory Rates/Routes
Millipedes
Mine Drainage
Minerals
Miocene
Mixing Height

Molds
Mollusks
Momentum
Monsoons
Montane Habitat
Mosses
Mushrooms
Mutation
Mutualism
Natural Gas
Neotectonics
Net Radiation
Nitrate
Nitrate Particles
Nitric Acid
Nitric Oxide
Nitrite
Nitrogen
Nitrogen Compounds
Nitrogen Dioxide
Nitrogen Oxides
Nitrous Oxide
Non-Metallic Minerals
Non-Methane Hydrocarbons
Nuclear Radiation
Nucleation
Nutrient Cycling
Nutrients
Observed Radiance
Ocean Color
Ocean Crust Deformation
Ocean Currents
Ocean Mixed Layer
Ocean Plateaus/Ridges
Ocean Tracers
Oil Spill
Oligocene
Optical Depth/Thickness
Optical Depth
Optical Thickness
Orbital Characteristics
Ordovician
Organic Carbon
Organic Matter

Organic Particles
Oscillations
Outgoing Longwave Radiation
Overturning
Oxidation/Reduction
Oxygen
Oxygen Demand
Oxygen Isotopes
Ozone
Ozone Burden
Ozone Profile
Paleocene
Paleomagnetic Data
Paleomagnetism
Paleosols
Paleovegetation
Paleozoic
Palustrine Wetlands
Parasitism
Particle Composition
Particle Density
Particle Distribution Functions
Particle Flux
Particle Speed
Particle Temperature
Particulate Matter
Particulates
Peatlands
Pelagic Habitat
Percolation
Permafrost
Permian
Petroleum
pH
Phase and Amplitude
Phosphate
Phosphorus
Photic Zone
Photolysis Rates
Photosynthesis
Photosynthetically Active Radiation
Physiological Parameters
Phytoplankton
Pigments

Pipelines
Planetary Boundary Layer
Planetary Boundary Layer Height
Plankton
Plant Characteristics
Pleistocene
Pliocene
Polar Motion
Political Divisions
Pollen
Polynyas
Population Dynamics
Position Characteristics
Post-Breeding
Potential Density
Potential Temperature
Precambrian
Precipitable Water
Precipitation Amount
Precipitation Anomalies
Precipitation Rate
Predation
Pressure Anomalies
Pressure Tendency
Pressure Thickness
Primary Production
Protist
Proton Flux
Public Health
Pycnocline
Pyroclastics
Quaternary
Radar Backscatter
Radar Cross-Section
Radar Imagery
Radar Reflectivity
Radiance
Radiative Flux
Radiative Forcing
Radio Wave
Radioactive Elements
Radiocarbon
Radioisotopes
Radiolarians

Rain
Range Changes
Reef Habitat
Reference Fields
Reference Systems
Reflectance
Reflected Infrared
Reforestation
Relief
Reptiles
Respiration
Restoration
Rift Valleys
Riparian Wetlands
River Ice
Rivers/Stream Habitat
Rivers/Streams
Rocky Coasts
Rotational Variations
Roundworms
Runoff
Saline Lakes
Salinity
Salt Transport
Saltwater Intrusion
Satellite Orbits
Savanna
Scattering
Scavenging
Sea Ice Concentration
Sea Ice Elevation
Sea Ice Motion
Sea Level Pressure
Sea Level Rise
Sea State
Sea Surface Height
Sea Surface Reflectance
Sea Surface Slope
Sea Surface Temperature
Seafloor Spreading
Seafloor Topography
Seamounts
Secchi Depth
Secondary Production

Sediment Chemistry
Sediment Composition
Sediment Grain Size
Sediment Transport
Sedimentary Rocks
Sedimentation
Sediments
Segmented worms
Seiches
Seismic Body Waves
Seismic Profile
Seismic Surface Waves
Selection
Sensor Counts
Sensor Measurements
Sewage
Shoals
Shoreline Displacement
Shorelines
Shortwave Radiation
Shrubland/Scrub
Sigma NMarchht
Significant Wave Height
Silicate
Siliceous Sediments
Silurian
Sink Temperature
Sinkholes
Skin Temperature
Sleet
Slime molds
Smog
Snow
Snow Cover
Snow Depth
Snow Energy Balance
Snow Facies
Snow Melt
Snow Water Equivalent
Snow/Ice Temperature
Social Behavior
Soil Absorption
Soil Bulk Density
Soil Chemistry

Soil Color
Soil Compaction
Soil Consistence
Soil Depth
Soil Fertility
Soil Heat Budget
Soil Horizons/Profile
Soil Impedance
Soil Mechanics
Soil Moisture/Water Content
Soil Moisture
Soil Plasticity
Soil Porosity
Soil Productivity
Soil Respiration
Soil Structure
Soil Temperature
Soil Texture
Soil Types
Solar Active Regions
Solar Events
Solar Flares
Solar Imagery
Solar Irradiance
Solar Oscillations
Solar Prominences
Solar Radiation
Solar Radio Waves
Solar Ultraviolet
Solar X-Rays
Sponges
Sporozoans
Springs
Stability
Stable Isotopes
Stage Height
Static Pressure
Static Temperature
Station Height
Storm Surge
Storms
Strain
Stratigraphic Sequence
Stratopause

Stream Chemistry
Streamfunctions
Stress
Subduction
Sublimation
Submarine Canyons
Succession
Sulfate Particles
Sulfur Dioxide
Sulfur Oxides
Sunshine
Sunspots
Surf Beat
Surface Air Temperature
Surface Pressure
Surface Roughness
Surface Winds
Surveys
Survival
Suspended Solids
Swamps
Swells
Symbiosis
Synoptic Maps
Temperative Profile
Temperature Anomalies
Temperature Profiles
Terrain Elevation
Terrigenous Sediments
Tertiary
Thermal Conductivity
Thermal Infrared
Thermal Properties
Thermocline
Thermohaline Circulation
Tidal Components
Tidal Currents
Tidal Height
Tidal Range
Topographic Effects
Tornados
Total Surface Water
Toxic Chemicals
Toxicity

Trace Elements
Trace Gases
Trace Metals
Transmittance
Transportation
Tree Rings
Trenches
Triassic
Trophic Dynamics
Tropopause
Tropospheric Ozone
Tsunamis
Turbidity
Turbulence
Typhoons
Ultraviolet Flux
Ultraviolet Radiation
Ultraviolet Sensor Temperature
Upper Level Winds
Upwelling
Urban Land
Urbanization
Varve Deposits
Vegetation Cover
Vegetation Index
Vegetation Species
Velocity Fields
Vertebrates
Vertical Wind Motion
Viewing Geometry
Virtual Temperature
Visibility
Visible Flux
Visible Imagery
Visible Radiance
Visible Radiation
Vital Statistics
Volatile Organic Compounds
Volcanic Ash/Dust
Volcanic Deposits
Volcanic Gases
Vorticity
Water-Leaving Radiance
Water Channels

Water Depth
Water Management
Water Masses
Water Pressure
Water Table
Water Temperature
Water Vapor
Water Vapor Burden
Water Vapor Profile
Water Yield
Wave Frequency
Wave Height
Wave Length
Wave Period
Wave Spectra
Wave Speed/Direction
Wave Types
Weathering
Wetlands
Whiteout
Wind-Driven Circulation
Wind Chill
Wind Shear
Wind Stress
Wind Waves
X-Ray
Yeast
Zooplankton

ElectronicMailAddress

Description

The address of the electronic mailbox of the organization or individual. The address, following NASA Global Change Master Directory format, should be of the form 'network name>network address'. Examples of network names are NSN, SPAN, telemail, ARPANET, and Internet. Examples of network addresses are NSSDCA::NG, MIKEMARTIN/NASA, MMARTIN@JPL.MILVAX, or mikem@eos.hitc.com.

Content Source: DP

Alias: Email address

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Email

EllipsoidName

Description

Identification given to established representation of the Earth's shape.

Content Source: DP

Constraints: EllipsoidName is mandatory if GeodeticModel class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeodeticModel

Description

Airy 1940 - applies to UK

Australian National 1965 - applies to Australia

Bessel 1841

Clarke 1866

Clarke 1880

Everest 1830 - applies to Asia

Geodetic Reference System 1980 (GRS80)

Hough

IAU 1976 - International Astronomical Union

International 1909 (Hayford)

Krassovsky 1940 - applies to former USSR

Mercury 1960 (Fischer 1960) - supports early heritage NASA satellite

Modified Airy - applies to UK

Modified Everest - applies to Asia

Modified Mercury 1968 (Modified Fischer 1960) - supports early heritage NASA satellite

New International 1967

World Geodetic System of 1966 (WGS66)

World Geodetic System of 1972 (WGS72)

World Geodetic System of 1984 (WGS84)

EndsatPresentFlag

Description

This attribute will denote that a data collection which covers, temporally, a discontinuous range, currently ends at the present date. This way, the granules, which comprise the data collection, that are continuously being added to inventory need not update the data collection metadata for each one. Note that MODIS granules may be added several thousand times a day, making the update of the data collection metadata impractical.

Content Source: DSS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Temporal

Description

Y = Yes, does end at present time.

N = No, does not end at present time.

EquatorCrossingDate

Description

This attribute represents the date of the descending equator crossing. The AMSR data products will also use this attribute to represent the date of the ascending equator crossing, as appropriate.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitCalculatedSpatialDomain

EquatorCrossingLongitude

Description

This attribute represents the terrestrial longitude of the descending equator crossing. The AMSR data products will also use this attribute to represent the terrestrial longitude of the ascending equator crossing, as appropriate.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitCalculatedSpatialDomain

EquatorCrossingTime

Description

This attribute represents the time of the descending equator crossing. The AMSR data products will also use this attribute to represent the time of the ascending equator crossing, as appropriate.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitCalculatedSpatialDomain

ExclusionGRingFlag

Description

Flag which determines if the coordinates represent the Outer or Exclusion G-Ring.

Content Source: PGE(granule); DP(collection)

Constraints: ExclusionGRingFlag is mandatory if GRing class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GPolygon

Description

Y - Value denotes geodetic latitude or longitude of the starting point of arc of an inner (exclusion) G-Ring.

N - Value denotes geodetic latitude or longitude of the starting point of an arc of an outer G-Ring.

ExpirationDate

Description

Date Advertisement expired.

Reference List

Name
AdvertisementMaster

FtpURL

Description

Universal Resource Locator that contains a reference to the location of an installable package.

Reference List

Name
InstallableServiceAdvertisement

FutureReviewDate

Description

Date of next planned QA peer review.

Content Source: DP; PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Review

GeographicalRegionName

Description

Contains a name for the geographical region the Regional Area Definition Guide applies to.
Example values could be: Nile Delta, Sahel Zone, Mississippi Valley, Sudanian Zone, Amazon Basin, Grand Canyon.

Content Source: DP

Constraints: if class utilized, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegionalAreaDefinitionGuide

Description

Free Text

GeographicCoordinateDescription

Description

Free Text

Reference List

Name
GeographicCoordinateSystem

GeographicCoordinateInformation

Description

Free Text

Reference List

Name
GeographicCoordinateSystem

GeographicCoordinateUnits

Description

Units of measure used for the geodetic latitude and longitude resolution values. For lat, a 2 digit decimal number from 0-90; for lon, a 3 digit decimal number from 0-180. + or absence of - for values north of equator or values west of prime meridian; - for all others.

Content Source: DP

Constraints: GeographicCoordinateUnits are mandatory if GeographicCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeographicCoordinateSystem

Description

Decimal Degrees

Decimal Minutes

Decimal Seconds

Degrees and Decimal Minutes

Degrees, minutes, and decimal seconds

Radians

Grads

kilometers

GIParameterList

Description

Describes the parameters that should be passed to a service when the service is executed. The content of the list is dependent upon the type of service (i.e. acquire, browse, subset, etc.).

Content Source: IOS

Reference List

Name
SignatureServiceAdvertisement

GranulePointer

Description

Pointer to a granule specification.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

GridCoordinateSystemName

Description

Name of the Grid Coordinate System. A plane-rectangular coordinate system usually based on, and mathematically adjusted to a map projection so that geographic positions can be readily transformed to and from plane coordinates. The zone identifier can be allocated per granule; hence the class 'ZoneIdentifier'.

Content Source: DP

Constraints:

If GridCoordinateSystem is used, zone identifier must be used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GridCoordinateSystem

Description

Universal Transverse Mercator (UTM) - Requires UTM zone number, 1-60 for Northern Hemisphere, -60 to -1 for Southern Hemisphere

Other Grid System - Requires description in lieu of zone identifier which includes name, parameters and values, and citation of the specification for the algorithms that describe the mathematical relationship between the Earth and the coordinates of the grid system.

GRingPointLatitude

Description

The geodetic latitude of a point of the G-ring.

Content Source: DP(collection);PGE(granule)

Constraints: GRingPointLatitude $\leq +90.0$

Constraints: GRingPointLatitude is mandatory if GRingPoint class is applicable. Constraints: GRingPointLatitude $\Rightarrow -90.0$

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GPolygonPoint

GRingPointLongitude

Description

The longitude of a point of the G-Ring.

Content Source: DP(collection);PGE(granule)

Constraints: GRingPointLongitude is mandatory if GRingPoint class is applicable. Constraints: GRingPointLongitude $\leq +180.0$

Constraints: GRingPointLongitude ≥ -180.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GPolygonPoint

GRingPointSequenceNo

Description

Value denotes the numerical sequence position of a G-Ring point.

Content Source: DP(collection);PGE(granule)

Constraints: GRingPointSequenceNo is mandatory if GRingPoint class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GPolygonPoint

GuideName**Description**

The name of the guide document.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Guide

Description

Regional Area Definition Guide

Archive Center Guide

Processing Center Guide

Campaign Guide

Platform Guide

Instrument Guide

ECS Collection Guide

Sensor Guide

Analysis Guide

HorizontalDatumName**Description**

The identification given to the reference system used for defining the coordinates of points.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeodeticModel

Description

NAD27 - North American Datum of 1927

NAD83 - North American Datum of 1983

HoursofService

Description

Time period when individuals can speak to the organization or individuals.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Contact

Implementation

Description

The name of the implemented form of the CSDT (standard formats, industry standards etc.), including lowest level object description.

Content Source:

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CSDTDescription

Description

HDF-EOS - HDF-EOS Datatypes for implementation: HDF Attribute, HDF Attributes, HDF Vdata, HDF (RIS8, RIS24), HDF SDS, SDS with attributes, multiple HDF SDSs, multiple Vdatas.

ASCII

HDF

Binary

netCDF

NMC GRIB

NMC BUFR

CCSDS - Consultative Committee for Space Data Systems establishes variety of standard formats e.g. time, telemetry packages, metadata, etc.

IndirectReference

Description

Name of object by which data are organized. Name is the ESDT related or other local name other than the formal CSDT reference. i.e. 2.5 degree bins for CERES, 5 degree bins for CERES, and source packets for level 0.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CSDTDescription

InputPointer

Description

Data model logical reference to Input Granule.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
InputGranule

InstrumentCharacteristicDataType

Description

The datatype of the instrument characteristic/attribute defined by InstrumentCharacteristicName.

Content Source: DP (Collection)

Constraints: Must exist if SensorCharacteristicValue exists

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
InstrumentCharacteristic

Description

int

varchar

datetime

date

time

float

InstrumentCharacteristicDescription

Description

The description of the instrument attribute.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
InstrumentCharacteristic

InstrumentCharacteristicName

Description

The name of the instrument characteristic attribute. Instrument characteristic are instrument-specific attributes.

Content Source: DP (Collection)

Constraints: Must conform to ECS attribute naming guidelines. Primary Key.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
InstrumentCharacteristic

InstrumentCharacteristicUnit

Description

The units of the attribute defined with InstrumentCharacteristic.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
InstrumentCharacteristic

InstrumentCharacteristicValue

Description

The value of the Instrument/attribute defined in InstrumentCharacteristic. Attributes must have single values.

Content Source: DP (Collection)

Constraints: Abstract class instantiated as either int:string:date:float.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
InstrumentCharacteristicValueClass

InstrumentGuidePointer

Description

Logical pointer to the Instrument Guide.
Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
InstrumentGuide

InstrumentLongName

Description

The expanded name of the primary sensory instrument. (e.g. Advanced Spaceborne Thermal Emission and Reflective Radiometer, Clouds and the Earth's Radiant Energy System, Human Observation)

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Instrument

Description

Active Cavity Radiometer Irradiance Monitor
Advanced Spaceborne Thermal Emission and Reflection Radiometer
Advanced Microwave Scanning Radiometer
Advanced Microwave Scanning Radiometer- EOS
Advanced Microwave Sounding Unit
Atmospheric Infrared Sounder
Clouds and the Earth's Radiant Energy System
Clouds and the Earth's Radiant Energy System Flight Model 1

Clouds and the Earth's Radiant Energy System Flight Model 2
 Cryogenic Limb Array Etalon Spectrometer
 Enhanced Thematic Mapper Plus
 Geoscience Laser Altimeter System
 Geostationary Operational Environmental Satellite Imager
 Global Positioning System Receiver
 HALogen Occultation Experiment
 High Resolution Doppler Imager
 High Resolution Dynamics Limb Sounder
 Humidity Sounder Brazil
 Improved Stratospheric And Mesospheric Sounder
 Land Remote-Sensing Satellite
 Lightning Imaging Sensor
 Moderate-Resolution Imaging Spectroradiometer
 Measurements of Pollution In The Troposphere
 Multispectral Imaging Radiometer
 Microwave Limb Sounder
 Multi-Angle Imaging SpectroRadiometer
 Multispectral Imaging Radiometer
 Ocean Color and Temperature Sensor
 Particle Environment Monitor Atmospheric X-ray Imaging Spectrometer
 Particle Environment Monitor High-Energy Particle Spectrometer
 Particle Environment Monitor Medium-Energy Particle Spectrometer
 Precipitation Radar
 Sea-Viewing Wide Field-of-View Sensor
 Solar Ultraviolet Spectral Irradiance Monitor
 Special Sensor Microwave/Imager
 Stratospheric Aerosol and Gas Experiment III
 Total Ozone Mapping Spectrometer
 TRMM Microwave Imager
 Tropospheric Emission Spectrometer
 Visible and InfraRed Scanner
 Visible and Infrared Spin Scan Radiometer
 WIND Imaging Interferometer

InstrumentShortName

Description

The unique identifier of an instrument. (e.g. ASTER, AVHRR-3, CERES, Human)

Content Source: DP (Collection); PGE (Granule)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Instrument

Description

ACRIM
AIRS
AMSR
AMSR-E
AMSU-A
ASTER
CERES
CERES FM1
CERES FM2
CLAES
ETM+
FM1
FM2
GLAS
GOES Imager
GPS
HALOE
HIRDLS
HRDI
HSB
ISAMS
LIS
MIR
MISR
MLS
MODIS
MOPITT
OCTS
PEM AXIS
PEM HEPS
PEM MEPS
PR
SeaWiFS
SAGE III
SSM/I
SUSIM
TES
TMI
TOMS

VIRS
VISSR
WINDII

InstrumentTechnique

Description

The instrument method or procedure.. (e.g. radiometer, manual enumeration)

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Instrument

Description

Broadband scanning radiometry
Correlation Spectrometry
Cross-Track Scanning Sounding
Cross-Track Scanning Microwave Sounding
Cross-Track Scanning Multichannel Infrared Sounding
Cross-Track Scanning Multichannel Microwave Sounding
Imaging Radiometry
Imaging Spectroradiometry
Infrared Limb Sounding
Infrared Sounding
Earth Limb-Scanning Grating Spectroradiometry
Laser Altimetry
Laser Altimetry and Light Detection and Radar
Limb and Nadir viewing Infrared Fourier Transform Spectrometer
Microwave Limb Sounding
Lunar Occultation
Multi-Angle Imaging Spectroradiometry
Passive Microwave
Pyrheliometry
Radionavigation
Scanning Radiometry
Self-calibrating solar/lunar occultation grating spectrometry
Solar Occultation
Correlation Radiometry

Internal Name

Description

Internal service name for ECS subsystem use only.

Reference List

Name
SignatureServiceAdvertisement

JournalArticleName

Description

The name of the journal article.

Content Source: DP

Constraints: must exist if article does.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
JournalArticle

JournalArticlePointer

Description

Data model logical reference to Journal Article.

Content Source: DSS

Constraints: if journal article exists, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
JournalArticle

LatitudeResolution

Description

The minimum difference between two adjacent latitude values expressed in Geographic Coordinate Units of measure.

Content Source: DP

Constraints: LatitudeResolution > 0.0

Constraints: LatitudeResolution is mandatory if GeographicCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeographicCoordinateSystem

LocalCoordinateSystemDescription

Description

A description of the coordinate system and its orientation to the surface of the Earth.

Content Source: DP

Constraints: LocalCoordinateSystemDescription is mandatory if LocalCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
LocalCoordinateSystem

Description

Free Text

Central Body, Fixed (CBF)

Central Body, Inertial (CBI)

Local Horizontal (LH)

Vertical Vehicle Local Horizontal (VVLH)

LocalGeoreferenceInformation

Description

A description of the information provided to register the local system to the Earth (e.g. control points, satellite ephemeral data, inertial navigation data).

Content Source: DP

Constraints: LocalGeoreferenceInformation is mandatory if LocalCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
LocalCoordinateSystem

LocalGranuleID

Description

Unique identifier for locally produced granule that ECS ingests and is required to capture.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDataGranule

LocalityDescription

Description

This attribute provides the rationale behind including this locality definition in ECS. It should include the area of Earth Science research that requires such a definition, a description of what the locality represents in general terms, and a brief description or reference to a description of the method used as the source of the definition.

Content Source: DP

Constraints: must exist if locality type does.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Locality

LocalityType

Description

Type of entity for which space/time extent is defined. Spatial and temporal domain will be used to define coverage of the data granule; or to define the varying spatial extent over time, of some geophysical event/ phenomena eg. Mid-west Flood of 93, or of certain seasons throughout the world, eg. monsoon season, or spring. It may be used to define the spatial and/or temporal extent of a 'region', be it geophysical or geopolitical in nature. The value is applied at the granule level.

Content Source: DP

Constraints: mandatory if class is applicable and if granule locality is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Locality

LocalityValue

Description

Provides name which spatial/temporal entity is known. This could change on a granule by granule basis. This attribute is paralleled by the AggregationType which applies at the collection level although locality has a more restricted usage. Several locality measures could be included in each granule.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GranuleLocality

Description

Canada/R - Regional Canada sites

Cryos – Cryosphere

Global
 Land - Global land surface
 Land/Cryos - Land ice and Snow regions.
 Land/CZ - Land w/ Coastal Zone
 Land/L - Local land sites
 Land/R - Regional land sites
 Limb - Limb sounding
 Local Surface - Local sites
 Ocean/Cryos - Regions with sea ice
 Ocean/I - Ocean with Case I sediments
 Ocean/II - Ocean with Case II sediments
 Ocean/L - Local oceanic sites
 Ocean/R - Regional oceanic sites
 Ocean/S - Southern Ocean
 Ocean/SA - Southern & Eastern North Atlantic
 Polar - Latitudes > 60 degrees N and S
 Tropic - Zonal Band 35 degrees N to 35 degrees S
 Wetlands - Global wetlands

LocalPlanarCoordinateSystemDescription

Description

A description of the local planar coordinate system.

Content Source: DP

Constraints: LocalPlanarCoordinateSystemDescription is mandatory if LocalPlanarCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
LocalPlanarCoordinateSystem

Description

Free Text

LocalPlanarGeoreferenceInformation

Description

A description of the information provided to register the local planar system to the Earth (e.g. control points, satellite ephemeral data, and inertial navigation data)

Content Source: DP

Constraints: LocalGeoreferenceInformation is mandatory if LocalCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
LocalPlanarCoordinateSystem

LocalVersionID

Description

Local version identifier for PGE defined granule versions.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

LongitudeResolution

Description

The minimum difference between two adjacent longitude values expressed in Geographic Coordinate Units of measure.

Content Source: DP

Constraints: LongitudeResolution > 0.0

Constraints: LongitudeResolution is mandatory if GeographicCoordinateSystem class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeographicCoordinateSystem

LongName

Description

This attribute will identify the long name associated with the collection. This includes dataset name/product name. This is the reference name used in describing the scientific contents of the data collection; it is not the 'id' of the data. The existing SPSO product names provide a start point.

Content Source: DP

Alias: dataset name

product name

Constraints: must be unique

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CollectionDescriptionClass

Description

reference RTM ECS ESDT LongName Baseline and proposed ESDT LongName Baseline on EDHS

MaintenanceandUpdateFrequency

Description

The frequency with which changes and additions are made to the collection after the initial dataset begins to be collected/processed.

None Planned - The collection is complete and therefore will not be updated further.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SingleTypeCollection

Description

Continually - The collection is updated more frequently than once a day.

Daily - The collection is updated once per day, every day.

Weekly - The collection is updated once per week.

Monthly - The collection is updated once per calendar month.

Annually - The collection is updated once per year; the first date of update is usually one year after the first date of receipt of data from this collection's source.

Unknown

As Needed - The collection is updated as determined by the Principal Investigator or according to on-demand requests from end users.

Irregular - The collection is updated on an unscheduled but periodic basis.

None Planned - The collection is complete and therefore will not be updated further.

MapProjectionName

Description

The name of the systematic representation of all or part of the surface of the Earth on a plane or developable surface.

Content Source: DP

Constraints: MapProjectionName is mandatory if MapProjection class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
MapProjection

Description

Lambert Azimuthal Equal Area - Requires standard parallel, longitude and scale factor of central meridian, latitude/longitude and scale factor of projection origin, false easting and northing, scale factor at equator & center line, height of perspective point above the surface, latitude/longitude of projection center, oblique line azimuth (angle+lat of origin), oblique line point (lat/lon), straight vertical longitude from pole.

Polar Stereographic - Requires standard parallel, longitude and scale factor of central meridian, latitude/longitude and scale factor of projection origin, false easting and northing, scale factor at equator & center line, height of perspective point above the surface, latitude/longitude of projection center, oblique line azimuth (angle+lat of origin), oblique line point (lat/lon), straight vertical longitude from pole.

Space Oblique Mercator B - Requires standard parallel, longitude and scale factor of central meridian, latitude/longitude and scale factor of projection origin, false easting and northing, scale factor at equator & center line, height of perspective point above the surface, latitude/longitude of projection center, oblique line azimuth (angle+lat of origin), oblique line point (lat/lon), straight vertical longitude from pole, plus the Landsat Satellite Number and the Path Number reflecting the orbit if the Landsat satellite.

Transverse Mercator - Requires standard parallel, longitude and scale factor of central meridian, latitude/longitude and scale factor of projection origin, false easting and northing, scale factor at equator & center line, height of perspective point above the surface, latitude/longitude of projection center, oblique line azimuth (angle+lat of origin), oblique line point (lat/lon), straight vertical longitude from pole.

Lambert Conformal Conic

Mercator

Polyconic

Integerized Sinusoidal Grid

Interrupted Goode Homolosine - A pseudocylindrical composite derived from the Sinusoidal and Mollweide projections.

Equiarectangular - The meridians and parallels are all equidistant straight parallel lines, the two sets crossing at right angles. A form of the Equidistant Cylindrical and Equidistant Conic projection where the two standard parallels are symmetrical about the Equator. However, if the Equator is made the standard parallel, true to scale and free of distortion, the meridians are spaced at the same distances as the parallels, and the graticule appears square. This form is called the Plate Carree.

Equidistant Conic - The simplest kind of conic projection with its equally spaced straight meridians and equally spaced circular parallels. If the one standard parallel is the Equator, the Equidistant Conic projection becomes the Plate Carree form of the Equidistant Cylindrical, but

the formulas must be changed. If the two standard parallels are symmetrical about the Equator, the Equirectangular results. If the standard parallel is the pole, the Azimuthal Equidistant projection is obtained.

Azimuthal Equidistant - It has the azimuthal characteristic that all directions or azimuths are correct when measured from the center of the projection. As its special feature, all distances are at true scale when measured between this center and any other point on the map. The polar aspect, like other polar azimuthals, has circles for parallels of latitude, all centered about the North or South Pole, and equally spaced radii of these circles for meridians. The parallels are spaced equidistantly on the spherical form.

MapProjectionPointer

Description

This is a data modeling logical reference to a map projection.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
MapProjection

MiscellaneousInformationPointerComment

Description

This attribute is used to provide the text displayed on the client for the MiscellaneousInformationPointer.

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
MiscellaneousInformation

MiscellaneousInformationPointer

Description

This attribute provides the additional information about the data set that is not in the guide document.

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
MiscellaneousInformation

MultipleDateName

Description

The name of the collection of discrete date/time events.
e.g. 'LIS 10/93 series'

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
MultipleDateTimePeriod

NorthBoundingCoordinate

Description

Northern-most coordinate of the limit of coverage expressed in geodetic latitude.

Content Source: DP(collection);PGE(granule)

Constraints: NorthBoundingCoordinate not null for collection only.

Constraints: NorthBoundingCoordinate <= +90.0

Constraints: NorthBoundingCoordinate => -90.0

Constraints: NorthBoundingCoordinate => SouthBoundingCoordinate

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
BoundingRectangle

NumberOfSensors

Description

The number of discrete (if any) sensors on an instrument.

Content Source: DP (Collection)

Constraints: Must correspond to sensors associated via SensorShortName

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Instrument

OperationalQualityFlag

Description

The granule level flag applying both generally to a granule and specifically to parameters at the granule level. When applied to parameter, the flag refers to the quality of that parameter for the granule (as applicable). The parameters determining whether the flag is set are defined by the developers and documented in the QualityFlagExplanation.

Content Source: DAAC

Constraints: One flag from QAFlags must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAFlags

Description

Passed - The granule (forparameter) has passed a specified operational test.

Failed - The granule (forparameter) has failed a specified operational test.

Being Investigated - The granule (forparameter) is suspect and being investigated using a operational test.

Not Investigated - The granule (forparameter) has not been investigated by DAAC operational staff.

Inferred Passed

Inferred Failed

Suspect

OperationalQualityFlagExplanation

Description

A text explanation of the criteria used to set operational quality flag; including thresholds or other criteria.

Reference List

Name
QAFlags

Description

Free Text

OperationMode

Description

Mode of operation of the instrument. Each instrument will have 1 to n modes which may be static for the collection, or change on a granule-by-granule basis. (e.g. domains: launch, survival, initialization, safe, diagnostic, roll, tilt, standby, routine, test, calibration).

Content Source: DP(collection);PGE(granule)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
OperationModeClass

Description

Calibration

Diagnostic

Fixed azimuth scan - Fixed azimuth plane scan.

Initialization

Launch

Normal

Roll

Rot. azimuth scan - Rotating azimuth plane scan

Routine

Safe

Solar calibration

Standby

Survival
Test
Tilt
IR&Visible
IR
Both
Other

OperationsManualPointer

Description

Data model logical reference to Operations Manual.

Content Source:

Constraints: If Operations Manual exists then OperationsManualPointer must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
OperationsManual

OrbitalModelName

Description

The reference to the orbital model to be used to calculate the geolocation of this data in order to determine global spatial extent.

Content Source: DP

Constraints: OrbitModelName is mandatory if OrbitCalculatedSpatialDomain class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
OrbitCalculatedSpatialDomain

Description

Free Text

OrbitNumber

Description

The orbit number to be used in calculating the spatial extent of this data.

Content Source: PGE

Constraints: constraints should be provided per satellite

Constraints: OrbitNumber is mandatory if OrbitCalculatedSpatialDomain class is applicable.

Constraints: OrbitNumber > 0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitCalculatedSpatialDomain

OrbitParametersPointer

Description

Data model reference to the orbit parameter information.

Content Source: DSS

Constraints: Orbit file must exist if OrbitParametersPointer is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitParametersGranule

OrdinateResolution

Description

The (nominal) minimum distance between the 'y' or row values of two adjacent points, expressed in Planar Distance Units of measure. Planar Distance Units of measure are units for distances whose domain values are meters, international feet, and survey feet.

Content Source: DP

Constraints: OrdinateResolution > 0.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CoordinateRepresentation

PackageSize

Description

Size of Package for the Installable Service. Each package size contains 'x' bytes.

Reference List

Name
InstallableServiceAdvertisement

ParameterMeasurementResolution

Description

This attribute will be used to identify the smallest unit increment to which the parameter value is measured.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PhysicalParameterDetails

ParameterName

Description

The measured science parameter expressed in the data granule.

Reference List

Name
MeasuredParameter

ParameterRangeBegin

Description

The minimum value of the range.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PhysicalParameterDetails

ParameterRangeEnd

Description

The maximum value of the range.

Content Source: DP

Reference List

Name
PhysicalParameterDetails

ParameterUnitsofMeasurement

Description

The standard units of measurement for a non-core attribute. AVHRR: Units of Geophysical Parameter=Units of Geophysical Parameter

Content Source: DP

Constraints: If ParameterValue exists then ParameterUnitsofMeasurement exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PhysicalParameterDetails

Description

Free Text

ParameterValue

Description

The values that can be assigned to a parameter name used at collection and granule level. The datatype for this attribute is the value of the attribute ParameterDatatype. The unit for this attribute is the value of the attribute ParameterUnitsofMeasurement.

Content Source: DP(collection); PGE(granule)

Constraints: If ParameterValue exists then the class ECSPParameter must exist. Constraints: If parameter is physical then units must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
InformationContent

ParameterValueAccuracy

Description

An estimate of the accuracy of the assignment of attribute value. i.e. AVHRR: Measurement Error or Precision=Measurement error or precision of a data product parameter. This can be specified in percent or the units with which the parameter is measured.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PhysicalParameterDetails

ParameterValueAccuracyExplanation

Description

This defines the method used for determining the Parameter Value Accuracy that is given for this non core attribute.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PhysicalParameterDetails

PerformanceTestResultsPointer

Description

Data model logical reference to Performance Test Results document.

Content Source: DSS

Constraints: If Performance Test Results exist then PerformanceTestResultsPointer must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PerformanceTestResults

Period1stDate

Description

This attribute provides the date of the first occurrence of this regularly occurring period which is relevant to the collection, granule, or event coverage.

Content Source: DP

Constraints:

Period1stDate is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

Period1stTime

Description

This attribute denotes the time of the first occurrence of this regularly occurring period which is relevant to the collection, granule, or event coverage.

Content Source: DP

Constraints:

Period1stTime is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

PeriodCycleDurationUnit

Description

The unit specification of the period cycle duration.

e.g. the RegularPeriodic event 'Spring-North Hemi' might have a
PeriodDurationUnit='month'

PeriodDurationValue=3.0

PeriodCycleDurationUnit='year'

PeriodCycleDurationValue='1.0

indicating that Spring-North Hemi lasts for 3.0 months and has a cycle duration of 1 year.

Example values include:

decade,

year,

month,

week,

day,

hour,

minute,

second,

microsecond,

millisecond

Content Source: DP

Constraints:

PeriodCycleDurationUnit is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

PeriodCycleDurationValue

Description

The number of PeriodCycleDurationUnits in the period cycle.
e.g. the RegularPeriodic event 'Spring-North Hemi' might have a PeriodDurationUnit='month'
PeriodDurationValue=3.0
PeriodCycleDurationUnit='year'
PeriodCycleDurationValue='1.0
indicating that Spring-North Hemi lasts for 3.0 months and has a cycle duration of 1.0 year.
The unit for this attribute is the value of the attribute PeriodCycleDurationUnit.

Content Source: DP

Constraints:

PeriodCycleDurationValue > 0.0 if used.

Constraints:

PeriodCycleDurationValue is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

PeriodDurationUnit

Description

The unit specification for the period duration.
Example values include:
decade,
year,
month,
week,
day,

hour,
minute,
second,
microsecond,
millisecond

Content Source: DP

Constraints:

PeriodDurationUnit is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

Description

Free Text

PeriodDurationValue

Description

The number of PeriodDurationUnits in the RegularPeriodic period.

e.g. the RegularPeriodic event 'Spring-North Hemi' might have a PeriodDurationUnit='month'

PeriodDurationValue=3.0

PeriodCycleDurationUnit='year'

PeriodCycleDurationValue='1.0

indicating that Spring-North Hemi lasts for 3.0 months and has a cycle duration of 1.0 year.

The unit for the attribute is the value of the attribute PeriodDurationValue.

Content Source: DP

Constraints:

PeriodDurationValue > 0.0 if used.

Constraints:

PeriodDurationValue is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

PeriodName

Description

The name given to the recurring time period.
e.g. 'spring - north hemi.'

Content Source: DP

Constraints:

PeriodName is mandatory if RegularPeriodic class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegularPeriodic

Description

Free Text

PGEDateLastModified

Description

Date when PGE information was last modified.

Reference List

Name
AlgorithmPackage

PGEFunction

Description

Function(s) performed by PGE.

Content Source: DP

Constraints:

If Delivered Algorithm Package is utilized then PGEFunction must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AlgorithmPackage

PGEIdentifier

Description

Each PGE is to have a unique identifier assigned by the SDPS/W developer. This unique identifier may be one component of a longer name that includes instrument acronym, PGE version number, and release date.

Content Source: DP; DAAC

Constraints:

If Delivered Algorithm Package is utilized then PGEIdentifier exists.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AlgorithmPackage

PGEName

Description

Name of Product Generation Executive.

Content Source: DP

Constraints:

If Delivered Algorithm Package is utilized then PGEName exists.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AlgorithmPackage

Description

Free Text

PGEVersion

Description

Version of PGE, updated whenever code or any static is input in the Delivered Algorithm Package.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AlgorithmPackage

PlanarCoordinateEncodingMethod

Description

The means used to represent horizontal positions in the planar coordinate system.

Content Source: DP

Constraints: PlanarCoordinateEncodingMethod is mandatory if map projection, grid coordinate system, or local planar coordinate system is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PlanarCoordinateInformation

Coordinate Pair - Will require description of encoding method in 'Coordinate Representation' in terms of abscissa and ordinate resolutions.

Distance and Bearing - Will require encoding method description using 'Distance and Bearing Representation', in terms of distance resolution, bearing resolution, bearing units, bearing reference direction, and bearing reference meridian.

Row and Column - Will require encoding method description using 'Coordinate Representation', in terms of abscissa and ordinate resolutions.

PlanarDistanceUnits

Description

Units of measure used for planar coordinate description distances.

Content Source: DP

Constraints: PlanarDistanceUnits are mandatory if map projection, grid coordinate system, or local planar coordinate system is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PlanarCoordinateInformation

Description

meters

PlannedDataSets

Description

Copy of content of line 5 of Production Plans; containing collection ShortName to be produced.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

PlatformCharacteristicDataType

Description

The datatype of the Platform Characteristic/attribute defined by PlatformCharacteristicName.

Content Source: DP (Collection).

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
PlatformCharacteristic

Description

int

varchar

datetime

date

time

float

PlatformCharacteristicDescription

Description

Description of the Platform Characteristic attribute.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
PlatformCharacteristic

PlatformCharacteristicName

Description

The name of the Platform Characteristic attribute.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
PlatformCharacteristic

PlatformCharacteristicUnit

Description

Units associated with the Platform Characteristic attribute value.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
PlatformCharacteristic

PlatformCharacteristicValue

Description

The value of the characteristic/attribute defined in PlatformCharacteristic. Attributes must have single values. (e.g. Model Number = 209).

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
PlatformCharacteristicValueClass

PlatformGuidePointer

Description

Logical pointer to the Platform Guide.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
PlatformGuide

PlatformLongName

Description

The expanded or long name of the platform associated with an instrument.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Platform

Description

Active Cavity Radiometer Irradiance Monitor Satellite

Advanced Earth Observing Satellite

Advanced Earth Observing Satellite II

Ante Meridian-1

Aqua EOS Polar Orbiting Satellite, 1:30 PM Ascending Equator Crossing

EOS Aura Mission Satellite Landsat-7

Meteor-3M

First EOS Chemistry Mission Satellite, 1:45 PM Ascending Equator Crossing

First EOS Polar Orbiting Satellite, 10:30 AM Descending Equator Crossing

First EOS Polar Orbiting Satellite, 1:30 PM Ascending Equator Crossing

Geostationary Meteorological Satellite-1

Geostationary Meteorological Satellite-2

Geostationary Meteorological Satellite-3

Geostationary Meteorological Satellite-4

Geostationary Meteorological Satellite-5

Geostationary Operational Environmental Satellite-1

Geostationary Operational Environmental Satellite-2

Geostationary Operational Environmental Satellite-3

Geostationary Operational Environmental Satellite-4

Geostationary Operational Environmental Satellite-5

Geostationary Operational Environmental Satellite-6
 Geostationary Operational Environmental Satellite-7
 Geostationary Operational Environmental Satellite-8
 Geostationary Operational Environmental Satellite-9
 Ice, Cloud and Land Elevation Satellite
 Meteorological Satellite-1
 Meteorological Satellite-2
 Meteorological Satellite-3
 Meteorological Satellite-4
 Meteorological Satellite-5
 Meteorological Satellite-6
 Meteorological Satellite-7
 Nimbus-7
 NOAA Polar Operational Environmental Satellite-6
 NOAA Polar Operational Environmental Satellite-7
 NOAA Polar Operational Environmental Satellite-8
 NOAA Polar Operational Environmental Satellite-9
 NOAA Polar Operational Environmental Satellite-10
 NOAA Polar Operational Environmental Satellite-11
 NOAA Polar Operational Environmental Satellite-12
 NOAA Polar Operational Environmental Satellite-14
 Television and Infrared Observation Satellite-N
 Tropical Rainfall Measuring Mission
 Defense Meteorological Satellite Program-F11
 Defense Meteorological Satellite Program-F13
 Orbital Sciences Corporation OrbView-2 Satellite
 Upper Atmosphere Research Satellite

PlatformShortName

Description

The unique platform name. (e.g. GOES-8)

Content Source: DP(Collection); PGE(Granule)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Platform

Description

ACRIMSAT

ADEOS

ADEOS-II

AM-1

Aqua

Aura

CHEM-1

L7 - Landsat-7

Meteor-3M

GMS-1

GMS-2

GMS-3

GMS-4

GMS-5

GOES-1

GOES-2

GOES-3

GOES-4

GOES-5

GOES-6

GOES-7

GOES-8

GOES-9

METEOSAT-1

METEOSAT-2

METEOSAT-3

METEOSAT-4

METEOSAT-5

METEOSAT-6

METEOSAT-7

Nimbus-7

NOAA-6

NOAA-7

NOAA-8

NOAA-9

NOAA-10

NOAA-11

NOAA-12

NOAA-14

Terra

TIROS-N

TRMM
DMSP-F11
DMSP-F13
ICESat
OrbView-2
UARS

PlatformType

Description

The most relevant platform type.

Content Source: DP (Collection); PGE (Granule)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Platform

Description

Aircraft - including balloons
Buoy
Human
Network
Other - e.g. animal mounted instruments
Platform
Spacecraft
Station
Vehicle
Vessel (Ship)

PointLatitude

Description

A single geodetic latitudinal value.

Content Source: DP(collection);PGE(granule)

Constraints: PointLatitude is mandatory if Point class is applicable.

Constraints: PointLatitude => -90.0 Constraints: PointLatitude <= +90.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Point

PointLongitude

Description

A single longitudinal value.

Content Source: DP(collection);PGE(granule)

Alias: Decimal Degrees

Constraints: PointLongitude is mandatory if Point class is applicable.

Constraints: PointLongitude => -180.0 Constraints: PointLongitude <= +180.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Point

PostalCode

Description

The zip or other postal code of the address.

Content Source: DP; DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactAddress

Description

Free Text

PrecisionofSeconds

Description

The precision (position in number of places to right of decimal point) of seconds used in measurement.

Content Source: DP

Constraints:

PrecisionofSeconds => 0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Temporal

PrimaryCSDT

Description

The name of the CSDT type of data organization (data type and sub type). Computer Science Data Types are the physical storage types required to support Earth Science Data Types(ESDTs), the logical objects seen in pyramid views.

Content Source: DP; DAAC

Alias: Data Format

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CSDTDescription

Description

Plain ASCII Text - Free-form textual structure for storing labels or long descriptions for display.

RTF Formatted ASCII Text - Formatted text for transfer in Rich Text Format.

HTML Formatted ASCII Text - Formatted text for transfer in HyperText Markup Language.

PS Formatted ASCII Text - Formatted text for transfer in Postscript.

PDF Formatted ASCII Text - Formatted text for transfer in Portable Document Format.

Binary ASCII Text - Text and graphics document in document processing application proprietary format.

P=V Metadata - 'Label=Value' where label is a field name and value is either a single value or list of values.

Standard Science Data Table - Binary and/or ASCII tabular data.

Indexed Science Data Table - Binary and/or ASCII tabular data which includes indices to other data objects.

Image - 2D raster data type.

n-Dim Array of Records - Binary n-dimensional array of cells that consist of records. A record can consist of multiple fields of varying type such as integer, floating point and string.

n-Dim Array of Scalars - Binary n-dimensional array of cells that consist of scalars of a single type. (e.g., one of 8-, 16- or 32-bit signed or unsigned integers; or 32- or 64-bit floating point). Can be conceptually viewed as an instantiation of the Array of Records where each record is a single field.

Projected Grid - Data which has been projected and binned into a rectangular grid using a known methodology. Metadata such as projection name, projection limits, and geometry are included in order to identify geo-location and coverage of grid cells.

Structured Grid - Data which has been projected and binned into a non-rectilinear data structure using a known methodology. Metadata such as projection name, projection limits, and geometry are included in order to identify geo-location and coverage of data structure cells.

Simple Swath - Typically, swath data arrays will be two dimensional arrays, corresponding to a 2D 'image' of the ground along the orbital track. Sometimes, though, swath data arrays may be 1D arrays, where there is one element per scan (time, altitude, etc.). Additionally, swath data arrays could have 3 or more dimensions, where the additional dimensions are channel number or altitude. A 'simple' swath structure is designated where every data array is of the same size and resolution.

Complex Swath - Created by a sensor making N observations in the across-track direction. The along-track direction causes the footprint to form a ribbon of M scans along the subnadir track. The data forms an array of observations N by M by L (where L is the number of spectral band values taken for each observation time). An additional array of geo-location or observation time data is provided at a resolution equal or lower than the observations. The Complex Swath may have observations of varying resolution.

Standard Point - Data made up of records and fields with some set of fields constituting a point location. Fields can be of any type. The location fields, taken together, can be considered the 'location record'. Metadata constituting 'header' data which applies to the entire table is included.

Indexed Point - Data made up of records and fields with some set of fields constituting a point location. Fields can be of any type including pointers. The location fields, taken together, can be considered the 'location record'. Some fields may be repeated for a set of observations; these fields may be separated as part of a 'header', table which would include pointers, offsets. and counts to the repeating data table or tables.

Structure - Group of datatypes. e.g. HDF Vgroup

CCSDS Packets

ProcessingCenter

Description

Center where collection was or is being processed. i.e. name of DAAC or SCF.

Content Source: DP; DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSCollection

Description

GSFC - Goddard Space Flight Center

LaRC - Langley Research Center

Landsat 7 MOC

ORNL - Oak Ridge National Laboratory

EDC - EROS Data Center

NSIDC - National Snow and Ice Data Center

JPL - Jet Propulsion Laboratory

CIESIN - Consortium for International Earth Science Information Network

EDOS - EOS Data and Operations System

MISR SCF - MISR Science Computing Facility

SAGE III SCF - SAGE III Science Computing Facility

SAGE III MOC - SAGE III Mission Operations Center

ERSDAC - Earth Remote Sensing Data Analysis Center in Japan

AMES

NCDC

NCEP

NESDIS

LIS SCF

MODAPS- MODIS Data Processing Center

ACRIM SCF- ACRIM Science Computing Facility
HATOYAMA
GSFC I-SIPS
AIRS-TLSCF- Atmospheric InfraRed Sounder Team Leader Science Computing Facility
MLS IPS
ASTER_OSF
TES SIPS
AMSR-E SIPS-GHCC
AMSR-E SIPS-GHCC+B54
AMSR-E SIPS-GHRC
AMSR-E SIPS-RSS
HIRDLS SIPS
NASDA/EOC
SeaWiFS DPS
JAXA – Japan Aerospace Exploration Agency
CDHF - Central Data Handling Facility
TSDIS - TRMM Science Data and Information System
NCCS – NASA Center for Computational Sciences
GDS – Ground Data System

ProcessingCenterGuidePointer

Description

Logical pointer to the Processing Center Guide.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingCenterGuide

ProcessingErrorReportPointer

Description

Data model reference to Processing Error Report specification.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingErrorReport

ProcessingFileDescriptionPointer

Description

Data model logical reference to Processing File Description document.

Content Source: DSS

Constraints: If Processing File Description exists then ProcessingFileDescriptionPointer must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingFileDescription

ProcessingLevelDescription

Description

This attribute provides a set of characteristics that can be combined to define science processing levels which do not conform to the standards found in ProcessingLevelID.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingLevel

Description

Ancillary Input- For AIRS (Static Ancillary)

RAW - Raw instruments.

CNTS - Converted to counts.

RADCORR - Radiometrically corrected.
GEOQUANT - Counts converted to geophysical quantities.
GEOLOC - Geolocated.
GRID - Gridded.
Sensor Measurements
Radiometric Counts
Telemetry Data
Transmissions
Level 1B Radiances
Geophysical Quantities at the sensor resolution or geolocated

ProcessingLevelID

Description

This attribute reflects the classification of the science data processing level, which defines in general terms the characteristics of the output of the processing performed.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingLevel

Description

0 - Raw instrument data at original resolution, time ordered, with duplicate packets removed.

1A - Level 0 data, which may have been reformatted or transformed reversibly, located to a coordinate system, and packaged with needed ancillary and engineering data.

1B - Radiometrically corrected and calibrated data in physical units at full instrument resolution as acquired.

1C - Level 1C data are Level 1A or 1B data that have been resampled and mapped onto uniform space-time grids. The data are calibrated (i.e., radiometrically corrected) and may have additional corrections applied (e.g., terrain correction).

2 - Retrieved environmental variables (e.g., ocean wave height, soil moisture, ice concentration) at the same location and similar resolution as the Level 1 source data.

2G - Similar to Level 2 but contains pixel to grid mappings within the product files.

3 - Data or retrieved environmental variables that have been spatially and/or temporarily resampled (i.e., derived from Level 1 or Level 2 data products). Such resampling may include averaging and compositing.

4 - Model output and/or variables derived from lower level data which are not directly measured by the instruments. For example, new variables based upon a time series of Level 2 or Level 3 data.

NA - Not Applicable - Under review by AHWGP.

ProcessingQAAttribute

Description

This attribute identifies the non-science QA attribute which did not meet pre-defined parameter thresholds during validation processing.

Content Source: PDPS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingQA

Description

CalendarDate
EquatorCrossingDate
EquatorCrossingLongitude
EquatorCrossingTime
LocalityValue
OrbitalModelName
OrbitNumber
ParameterValue
RangeBeginningDate
RangeBeginningTime
RangeEndingDate
RangeEndingTime
ReprocessingActual
ReprocessingPlanning
ShortName
SizeMBECSDDataGranule
StartOrbitNumber

StopOrbitNumber
TimeofDay
VerticalSpatialDomainType
VerticalSpatialDomainValue

ProcessingQADescription

Description

This attribute provides description of the error encountered during processing for the specified Processing QA Attribute

Content Source: PDPS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingQA

Description

Free Text

ProcessingReportPeriod

Description

Period of processing report.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ProcessingReport

Description

90

30

7

3

1

ProcessingReportType

Description

Type of processing report supplied by Planning Subsystem.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ProcessingReport

ProcessingResourceUsageReportPointer

Description

Data model logical reference to the Processing Resource Usage Report.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingResourceUsageReport

Description

Status

Error

Rsrc. Usg. - Resource Usage

ProcessingStatusReportPointer

Description

Data model logical reference to the Processing Status Report.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProcessingStatusReport

ProductionDateTime

Description

The date and time a specific granule was produced by a PGE.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

ProductionHistoryPointer

Description

Data model logical reference to the granule level production history file.

Content Source: DSS

Constraints: Production History log must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionHistory

ProductionPlanDescription

Description

The description of the production plan.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

Description

Free Text

ProductionPlanEndDate

Description

The ending date for which the production plan is applicable.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

ProductionPlanForecast

Description

The span of time within the plan (measured in days). i.e. the forecast horizon within the production plan.

Content Source: PLS

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

ProductionPlanPointer

Description

Logical pointer to the production plans produced by the ECS Planning Subsystem.

Content Source: DSS

Constraints: must exist for all ECS-produced products.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

ProductionPlanStartDate

Description

The beginning date for which the production plan is applicable.

Content Source: PLS

Constraints: must exist for all ECS-produced products.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProductionPlan

ProgrammersGuidePointer

Description

Data model logical reference to Programmers Guide document.

Content Source: DSS

Constraints:

If Programmers Guide exists then ProgrammersGuidePointer must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ProgrammersGuide

ProviderURL

Description

URL of the Advertisement provider.

Content Source: IOS

Reference List

Name
ProviderAdvertisement

QAGranulePointer

Description

Data model logical reference to QA Granule.

Content Source: DSS

Constraints: If QAGranule exists then QAGranulePointer must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAGranule

QAPercentCloudCover

Description

This attribute is used to characterize the cloud cover amount of a granule. This attribute may be repeated for individual parameters within a granule. (Note - there may be more than one way to define a cloud or its effects within a product containing several parameters; i.e. this attribute may be parameter specific)

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
QAStats

QAPercentInterpolatedData**Description**

Granule level % interpolated data. This attribute can be repeated for individual parameters within a granule.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAStats

QAPercentMissingData**Description**

Granule level % missing data. This attribute can be repeated for individual parameters within a granule.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAStats

QAPercentOutofBoundsData

Description

Granule level % out of bounds data. This attribute can be repeated for individual parameters within a granule.

Content Source: PGE

Constraints: mandatory

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAStats

QualityTextCommentPointer

Description

Data model logical reference to collection level pointer to Quality Text Comment document.

Content Source: DSS

Constraints: If QualityText exists then QualityTextCommentPointer exists.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QualityTextComment

RadiusUnits

Description

The unit of measurement describing the distance from the center of spatial extent or coverage to the furthest point covered by the spatial extent of the locality used to determine a circular region representing general extent or coverage.

Content Source: DP(collection);PGE(granule)

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Circle

RadiusValue

Description

The distance from the center of spatial extent or coverage to the furthest point covered by the spatial extent of the locality, stated in RadiusUnits, used to determine a circular region representing general extent or coverage.

Content Source: DP(collection);PGE(granule)

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Circle

RangeBeginningDate

Description

The year (and optionally month, or month and day) when the temporal coverage period being described began.

Content Source: DP(collection);PGE(granule)

Alias: Start Date

Constraints:

RangeBeginningDate is mandatory if RangeDateTime class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RangeDateTime

RangeBeginningTime

Description

The first hour (and optionally minute, or minute and second) of the temporal coverage period being described.

Content Source: DP(collection);PGE(granule)

Constraints:

RangeBeginningTime is mandatory if RangeDateTime class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RangeDateTime

RangeEndingDate

Description

The last year (and optionally month, or month and day) of the temporal coverage period being described.

GSFC AVHRR This date represents the end date of the latest granule contained in the product.

MM/DD/YY format is product-specific for: sage_atmos_dyn, sage_atmos_comp, erbe_erp

MMDDYYYY format is product-specific for: LARC_FIRE, LARC_GTE

Content Source: DP(collection);PGE(granule)

Constraints:

RangeEndingDate is mandatory if RangeDateTime class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RangeDateTime

RangeEndingTime

Description

The last hour (and optionally minute, or minute and second) of the temporal coverage period being described for granule or collection.

Content Source: DP(collection);PGE(granule)
Constraints:
RangeEndingTime is mandatory if RangeDateTime class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RangeDateTime

ReferencePaperReference

Description

Contains the unique ID of the Reference Paper as issued by publisher, such as 'NOS NSG 5', or 'JPL Publication 91- 29'.

Content Source: DP

Constraints: if reference papers utilized, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ReferencePaper

ReferencePaperType

Description

Contains the type of reference paper.

Content Source: DP

Constraints: if reference papers utilized, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ReferencePaper

Description

Stand Alone Document

Journal Article

RegionalAreaDefinitionGuidePointer**Description**

Logical pointer to the Regional Area Definition Guide.

Content Source: DSS

Constraints: if guide exists, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
RegionalAreaDefinitionGuide

ReprocessingActual**Description**

Granule level, stating what reprocessing has been performed on this granule.

Content Source: PGE

Constraints:

Constrained to number of times reprocessed.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

Description

reprocessed

processed once

reprocessed once

reprocessed twice

processed 1 time
processed 2 times
processed 3 times
processed 4 times
processed 5 times
processed 6 times
processed 7 times
processed 8 times
processed 9 times
processed 10 times

ReprocessingPlanned

Description

Granule level, stating what reprocessing may be performed on this granule.

Content Source: PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

Description

no further update anticipated
further update is anticipated
further update anticipated using enhanced PGE

RevisionDate

Description

Represents the date and possibly the time that this directory entry was created or the latest date and time of its modification or update.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSCollection

Role

Description

Classification of individuals who are associated with a given data set.

Content Source: DP

Constraints:

Mandatory if contact is used.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Contact

Description

Archive

Funding Source

Producer

Distributor

Data Originator

Investigator

Investigator ID

User Services

Quality Assessment

Instrument

ScienceQualityFlag

Description

Granule level flag applying to a granule, and specifically to parameters. When applied to parameter, the flag refers to the quality of that parameter for the granule (as applicable). The parameters determining whether the flag is set are defined by the developers and documented in the Quality Flag Explanation.

Content Source: PGE(granule)

Constraints: One flag from QAFlags must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAFlags

Description

Passed - The granule (forparameter) has passed a specified science test.

Failed - The granule (forparameter) has failed a specified science test.

Being Investigated - The granule (forparameter) is being investigated by an expert.

Not Investigated - The granule (forparameter) has not been investigated by an expert.

Inferred Passed

Inferred Failed

Suspect - For MODIS Land

ScienceQualityFlagExplanation

Description

A text explanation of the criteria used to set science quality flag; including thresholds or other criteria.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
QAFlags

Description

Free Text

ScienceReviewDate

Description

Date of last QA peer review.

Content Source: DP; PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Review

ScienceReviewStatus

Description

Type of Review which occurred on the 'Science Review Date'

Content Source: DP; PGE

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Review

Description

QA at DAACs - In general, the DAACs role in the QC process will be to ensure the integrity of the data (non-science quality control) -- i.e. data are not corrupted in the transfer, archival or retrieval process. DAACs may also perform science quality control (though an SCF responsibility) through pre-arranged agreements with their instrument teams.

QA at SCF - The SCFs role in the QC process of collections will be to ensure science quality control of data products over the length of the data gathering process. Techniques such as trend analysis of the data may be applied within this context.

QA by Data Consumers - Data consumers who utilize the datasets will perform an indirect method of quality control, uncovering errors within the datasets as they perform their research. Much of this documentation may be found in journal article or conference papers.

None - The status must be set, and cannot default to having been completed. None also applies to those data, which are ingested from external sources and are not known to have been subjected to any form of quality control, or have quality ratings for which the definitions are not available. QA within Software

SemiMajorAxis

Description

Radius of the equatorial axis of the ellipsoid.

Content Source: DP

Constraints: SemiMajorAxis > 0.0 Constraints: SemiMajorAxis mandatory if GeodeticModel class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
GeodeticModel

SensorCharacteristicDataType

Description

The datatype of the Instrument Characteristic/attribute defined by InstrumentCharacteristicName.

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SensorCharacteristic

Description

int

varchar

datetime

date

time

float

SensorCharacteristicDescription

Description

A description of the attribute defined by SensorCharacteristicName. (e.g. SensorCharacteristicName=SensorDevice, SensorCharacteristicDescription= Charge coupled device).

Content Source: DP (Collection)

Constraints: Use to define single-valued sensor attributes, not new objects.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SensorCharacteristic

SensorCharacteristicName

Description

The name of the Sensor Characteristic/attribute. Sensor attributes defined using SensorCharacteristicName must be single-valued attributes of the object 'Sensor' and not attributes of undefined objects.

Content Source: DP (Collection); PGE (Granule)

Constraints: Used to define sensor attributes, not objects associated with sensors.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SensorCharacteristic

SensorCharacteristicUnit

Description

The unit of the Sensor Characteristic (e.g. nanometers).

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SensorCharacteristic

SensorCharacteristicValue

Description

The value of the attribute defined in the class SensorCharacteristicDescription. Attributes must have single values.

Content Source: DP (Collection); PGE (Granule)

Constraints: Domain defined by SensorCharacteristicDataType

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SensorCharacteristicValueClass

SensorGuidePointer

Description

Logical pointer to the Sensor Guide.

Content Source: DAAC Alias:

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SensorGuide

SensorLongName

Description

The generic or long name description of a sensor. (e.g. Visible-Near Infrared, Human Visual, Human Auditory)

Content Source: DP (Collection)

Alias: Detector Long Name

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Sensor

Description

Active Cavity Radiometer
Enhanced Thematic Mapper Plus
Shortwave Scanning Thermistor Bolometer Detector
Total Scanning Thermistor Bolometer Detector
Window Scanning Thermistor Bolometer Detector
Charge Coupled Device
PIN Diode Spectrometer
Shortwave Infrared
Thermal Infrared
Visible Near Infrared
Charge Coupled Devicebased Pushbroom Nadir Viewing Camera A
Charge Coupled Devicebased Pushbroom Fore Viewing Camera A
Charge Coupled Devicebased Pushbroom Aft Viewing Camera A
Charge Coupled Devicebased Pushbroom Fore Viewing Camera B
Charge Coupled Devicebased Pushbroom Aft Viewing Camera B
Charge Coupled Devicebased Pushbroom Fore Viewing Camera C
Charge Coupled Devicebased Pushbroom Aft Viewing Camera C
Charge Coupled Devicebased Pushbroom Fore Viewing Camera D
Charge Coupled Devicebased Pushbroom Aft Viewing Camera D
Correlation Spectrometer at 2.3 um
Correlation Spectrometer at 2.4 um
Correlation Spectrometer at 4.7 um
Global Positioning System
Special Sensor Microwave/Imager
Cross-track Scanning Radiometer
Visible and Infrared Spin Scan Radiometer
Light Amplification by Stimulated Emission of Radiation
Light Detection and Ranging
Microwave Limb Sounder
Multispectral Imaging Radiometer
M1a Detector IR span wavenumber range 2552.53 cm-1 through 2676.93 cm-1
M1b Detector IR span wavenumber range 2309.49 cm-1 through 2433.60 cm-1
M2a Detector IR span wavenumber range 24342.58 cm-1 through 2554.90 cm-1

M2b Detector IR span wavenumber range 2169.46 cm⁻¹ through 2311.52 cm⁻¹
 M3 Detector IR span wavenumber range 1337.20 cm⁻¹ through 1442.13 cm⁻¹
 M4a Detector IR span wavenumber range 1540.36 cm⁻¹ through 1613.20 cm⁻¹
 M4b Detector IR span wavenumber range 1459.55 cm⁻¹ through 1526.69 cm⁻¹
 M4c Detector IR span wavenumber range 1283.63 cm⁻¹ through 1338.19 cm⁻¹
 M4d Detector IR span wavenumber range 1216.29 cm⁻¹ through 1271.91 cm⁻¹
 M5 Detector IR span wavenumber range 1055.13 cm⁻¹ through 1135.70 cm⁻¹
 M6 Detector IR span wavenumber range 973.03 cm⁻¹ through 1045.24 cm⁻¹
 M7 Detector IR span wavenumber range 910.51 cm⁻¹ through 973.44 cm⁻¹
 M8 Detector IR span wavenumber range 910.51 cm⁻¹ through 973.44 cm⁻¹
 M9 Detector IR span wavenumber range 788.51 cm⁻¹ through 851.77 cm⁻¹
 M10 Detector IR span wavenumber range 727.20 cm⁻¹ through 780.97 cm⁻¹
 M11 Dectector IR span wavenumber range 687.26 cm⁻¹ through 728.08 cm⁻¹
 M12 Detector IR span wavenumber range 649.23 cm⁻¹ through 681.66 cm⁻¹
 VNIR Channel 1 spans wavelength range 0.40 micrometer through 0.44 micrometer
 VNIR Channel 2 spans wavelength range 0.58 micrometer through 0.68 micrometer
 VNIR Channel 3 spans wavelength range 0.71 micrometer through 0.93 micrometer
 VNIR Channel 4 spans wavelength range 0.48 micrometer through 0.95 micrometer
 AMSU-A Chan 1 center freq 23.800 GHz bandpass 0.270 GHz
 AMSU-A Chan 2 center freq 31.400 GHz bandpass 0.180 GHz
 AMSU-A Chan 3 center freq 50.300 GHz bandpass 0.180 GHz
 AMSU-A Chan 4 center freq 52.800 GHz bandpass 0.400 GHz
 AMSU-A Chan 5 center freq 53.596+/-0.115 GHz bandpass 2x0.170 GHz
 AMSU-A Chan 6 center freq 54.400 GHz bandpass 0.400 GHz
 AMSU-A Chan 7 center freq 54.940 GHz bandpass 0.400 GHz
 AMSU-A Chan 8 center freq 55.500 GHz bandpass 0.330 GHz
 AMSU-A Chan 9 center freq 57.290344 GHz bandpass 0.330 GHz
 AMSU-A Chan 10 center freq 57.290344+/-0.217 GHz bandpass 2x0.078 GHz
 AMSU-A Chan 11 center freq 57.290344+/-0.3222+/-0.048 bandpass 4x0.036 GHz
 AMSU-A Chan 12 center freq 57.290344+/-0.3222+/-0.022 bandpass 4x0.016 GHz
 AMSU-A Chan 13 center freq 57.290344+/-0.3222+/-0.010 bandpass 4x0.008 GHz
 AMSU-A Chan 14 center freq 57.290344+/-0.3222+/-0.0045 bandpass 4x0.003 GHz
 AMSU-A Chan 15 center freq 89.000 GHz bandpass 6.000 GHz
 HSB Chan 1 NOT IMPLEMENTED AND CONTAINS NO VALID DATA
 HSB Chan 2 center freq 150.00 GHz bandpass 4.0 GHz
 HSB Chan 3 center freq 183.31+/-1.0 GHz bandpass 2x0.5 GHz
 HSB Chan 4 center freq 183.31+/-3.0 GHz bandpass 2x1.0 GHz
 HSB Chan 5 center freq 183.31+/-7.0 GHz bandpass 2x2.0 GHz
 Infrared Sounder
 Laser Altimeter
 Photon Counter for the 532 nm Aerosol Returns
 Pointing FTS with 4 co-aligned detector arrays, 16 pixels each
 Cloud LIDAR
 Dual Frequency GPS receiver

Geostationary Operational Environmental Satellite Imager
 HIRDLS Channel 1 N2O aerosol 17.01-17.76 microns
 HIRDLS Channel 2 CO2 16.26-16.67 microns
 HIRDLS Channel 3 CO2 15.63-15.97 microns
 HIRDLS Channel 4 CO2 15.15-15.97 microns
 HIRDLS Channel 5 CO2 14.71-15.27 microns
 HIRDLS Channel 6 aerosol 11.96-12.18 microns
 HIRDLS Channel 7 CFC13 (CFC11) 11.72-11.98 microns
 HIRDLS Channel 8 HNO3 11.05-11.63 microns
 HIRDLS Channel 9 CF2Cl2 (CFC12) 10.72-10.93 microns
 HIRDLS Channel 10 O3 9.90-10.10 microns
 HIRDLS Channel 11 O3 9.54-9.89 microns
 HIRDLS Channel 12 O3 8.77-8.93 microns
 HIRDLS Channel 13 aerosol 8.20-8.33 microns
 HIRDLS Channel 14 N2O5 7.94-8.14 microns
 HIRDLS Channel 15 N2O 7.80-7.96 microns
 HIRDLS Channel 16 ClONO2 7.70-7.82 microns
 HIRDLS Channel 17 CH4 7.30-7.55 microns
 HIRDLS Channel 18 H2O 6.97-7.22 microns
 HIRDLS Channel 19 aerosol 7.06-7.13 microns
 HIRDLS Channel 20 H2O 6.49-7.03 microns
 HIRDLS Channel 21 NO2 6.12-6.32 microns
 Lighting Imaging Sensor
 Correlation Radiometer at 2.3 um
 Correlation Radiometer at 2.4 um
 Correlation Radiometer at 4.7 um
 Off-axis Rotating Scanning Telescope
 Precipitation Radar
 TRMM Microwave Imager
 Visible and InfraRed Scanner
 Cross-track Scanning Monochromator

SensorShortName

Description

A sensor is a defined sensory sub-component of an instrument. (e.g. InstrumentShortName=ASTER, NumberofSensors= 3, SensorShortName= SWIR, SensorShortName= TIR, SensorShortName= VNIR) In cases where the Instrument has a single Sensor or the Instrument and Sensor are synonymous then both attributes should be populated. (e.g. AVHRR). Sensors cannot exist without Instruments.

Content Source: DP (Collection); PGE (Granule)

Alias: Detector Short Name

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Sensor

Description

ACR
AMSR-E
ETM+
FTS
Shortwave Detector
Total Detector
Window Detector
CCD
CD
GPS
Laser
LIDAR
PIN Diode
SWIR
TIR
VNIR
VNIR Channel 1
VNIR Channel 2
VNIR Channel 3
VNIR Channel 4
AMSU-A Channel 1
AMSU-A Channel 2
AMSU-A Channel 3
AMSU-A Channel 4
AMSU-A Channel 5
AMSU-A Channel 6
AMSU-A Channel 7
AMSU-A Channel 8
AMSU-A Channel 9
AMSU-A Channel 10
AMSU-A Channel 11
AMSU-A Channel 12
AMSU-A Channel 13
AMSU-A Channel 14
AMSU-A Channel 15

CCD Camera AN
CCD Camera AF
CCD Camera AA
CCD Camera BF
CCD Camera BA
CCD Camera CF
CCD Camera CA
CCD Camera DF
CCD Camera DA
HSB Channel 1
HSB Channel 2
HSB Channel 3
HSB Channel 4
HSB Channel 5
LA
PC
M1a Detector Array
M1b Detector Array
M2a Detector Array
M2b Detector Array
M3 Detector Array
M4a Detector Array
M4b Detector Array
M4c Detector Array
M4d Detector Array
M5 Detector Array
M6 Detector Array
M7 Detector Array
M8 Detector Array
M9 Detector Array
M10 Detector Array
M11 Detector Array
M12 Detector Array
2.3um Radiometer
2.4um Radiometer
4.7um Radiometer
AN
AF
AA
BF
BA
CF
CA
DF

DA
VISSR
MIR
SSM/I
ShortWave Detector
1064 nm Detector
GPS Receiver
GOES Imager
LIS
MLS
IRS
MODIS
VNIR Channel 1
VNIR Channel 2
VNIR Channel 3
VNIR Channel 4
HIRDLS Channel 1
HIRDLS Channel 2
HIRDLS Channel 3
HIRDLS Channel 4
HIRDLS Channel 5
HIRDLS Channel 6
HIRDLS Channel 7
HIRDLS Channel 8
HIRDLS Channel 9
HIRDLS Channel 10
HIRDLS Channel 11
HIRDLS Channel 12
HIRDLS Channel 13
HIRDLS Channel 14
HIRDLS Channel 15
HIRDLS Channel 16
HIRDLS Channel 17
HIRDLS Channel 18
HIRDLS Channel 19
HIRDLS Channel 20
HIRDLS Channel 21
SeaWiFS
OCTS
PR
TMI
VIRS
Scanner

SensorTechnique

Description

The sensor technique. (e.g. laser altimetry)

Content Source: DP (Collection)

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Sensor

Description

Active Cavity Radiometry

Broadband Microwave Radiometry

Broadband Thermistor Bolometry

Cooled Array Grating Spectrometer with photovoltaic HgCdTe detector array

Cooled Array Grating Spectrometer with photoconductive HgCdTe detector array

Counting of 532nm photon return in 75m bins 40km to surface

Doubly Split Bandpass Microwave Radiometry

Exact Measurement of Time between Transmit Pulse and receive ground return

HSB Chan 1 NOT IMPLEMENTED AND CONTAINS NO VALID DATA

Measure of 1064nm return energy in 75m bins from 20km to surface

Silicon Diode Detector behind sharp cut-on and cut-off interference filter

Silicon Diode Detector behind short-wave side sharp cut-on interference filter

Spectrometry

Whiskbroom Scanning Radiometry

Spectroscopy

Imaging Radiometry

Infrared Limb Sounding

Laser Ranging

Radiometry

Split Bandpass Microwave Radiometry

Imaging Spectroradiometry

Microwave Limb Sounding

Passive Microwave

Imaging Spectroradiometry
Infrared Sounding
Laser Altimetry
Photon Counting
Pseudorange and carrier phase
Ranging between the tops and bottoms of clouds

Correlation Radiometry

SequenceNumber

Description

Line number for description over 255 positions.

Reference List

Name
AdvertisementDescription

ServiceClass

Description

This attribute describes the class of service. (e.g. subset)

Content Source: IOS, DSS

Reference List

Name
SignatureServiceAdvertisement

ServiceName

Description

The name of the service, such as SubsetByParameter which belongs to the ServiceClass Subset.

Content Source: IOS, DSS

Reference List

Name
SignatureServiceAdvertisement

ServiceURL

Description

URL that references the service for a MIME type service advertisement. This URL is what would be invoked to access the service.

Content Source: IOS

Reference List

Name
MimeServiceAdvertisement

ShortName

Description

This name will identify the short name associated with the collection or granule. This includes the ECS Technical Baseline product names, i.e. CER02, MOD12, etc. This is the official reference name used in identifying the contents of the data collection.

Content Source: DP

Constraints: must be unique

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CollectionDescriptionClass

Description

reference RTM ECS ESDT ShortName Baseline and proposed ESDT ShortName Baseline on EDHS

SizeMBECSDDataGranule

Description

The size attribute will indicate the volume of data contained in the granule.

Content Source: PGE

Constraints:
mandatory for granule

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSDDataGranule

SouthBoundingCoordinate

Description

Southern-most limit of coverage expressed in geodetic latitude.

Content Source: DP(collection);PGE(granule)

Constraints: SouthBoundingCoordinate not null for collection only.

Constraints: SouthBoundingCoordinate => -90.0

Constraints: SouthBoundingCoordinate <= +90.0

Constraints: SouthBoundingCoordinate <= NorthBoundingCoordinate

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
BoundingRectangle

SpatialCoverageType

Description

This attribute denotes whether the locality/coverage requires horizontal, vertical, or both in the spatial domain and coordinate system definitions.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Spatial

Description

HORIZ&VERT - Horizontal & Vertical

Horizontal

Vertical

SpatialKeyword

Description

This attribute specifies a word or phrase which serves to summarize the spatial regions covered by the collection. It may be repeated if several regions are covered. This often occurs when a collection is described as covering some large region, and several smaller subregions within that region.

Content Source: DP

Alias: Location

Location Keyword

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SpatialKeywordClass

Description

Africa

Antarctica

Arctic Ocean

Asia

Atlantic Ocean

Equatorial

Europe

Global

Indian Ocean

Mid-Latitude

North America

Pacific Ocean

South America

Southern Ocean

Central America

Oceania
North Africa
Central Africa
West Africa
Southern Africa
East Africa
Western Asia
Central Asia
Southern Asia
Southeast Asia
Eastern Asia
Western Europe
Eastern Europe
Middle East
Northern Hemisphere
Southern Hemisphere
Eastern Hemisphere
Western Hemisphere
North Atlantic Ocean
North Pacific Ocean
South Atlantic Ocean
South Pacific Ocean
Baltic Sea
Bering Sea
Black Sea
Caribbean Sea
Caspian Sea
East China Sea
Great Lakes
Gulf of Mexico
Hudson Bay
Mediterranean Sea
North Sea
Red Sea
Sea of Japan
Sea of Okhotsk
South China Sea
Yellow Sea
Afghanistan
Albania
Algeria
American Samoa
Andorra
Angola

Anguilla
Antigua and Barbuda
Argentina
Armenia
Australia
Austria
Azerbaijan
Bahamas
Bahrain
Bangladesh
Barbados
Belarus
Belgium
Belize
Benin
Bermuda
Bhutan
Bolivia
Bosnia and Herzegovina
Botswana
Brazil
Brunei Darussalam
Bulgaria
Burkina Faso
Burma
Burundi
Cambodia
Cameroon
Canada
Cape Verde
Central African Republic
Chad
Chile
China
Colombia
Comoros
Congo
Cook Islands
Costa Rica
Cote d'Ivoire
Croatia
Cuba
Cyprus
Czech Republic

Denmark
Djibouti
Dominica
Dominican Republic
Ecuador
Egypt
El Salvador
Equatorial Guinea
Eritrea
Estonia
Ethiopia
Fiji
Finland
France
Gabon
Gambia
Georgia
Germany
Ghana
Greece
Grenada
Guam
Guatemala
Guinea
Guinea-Bissau
Guyana
Haiti
Holy See
Honduras
Hungary
Iceland
India
Indonesia
Iran
Iraq
Ireland
Israel
Italy
Jamaica
Japan
Jordan
Kazakhstan
Kenya
Kiribati

Korea, DPR
Korea, Republic
Kuwait
Kyrgyzstan
Laos
Latvia
Lebanon
Lesotho
Liberia
Libya
Liechtenstein
Lithuania
Luxembourg
Macedonia, FYR
Madagascar
Malawi
Malaysia
Maldives
Mali
Malta
Marshall Islands
Mauritania
Mauritius
Mexico
Micronesia
Moldova
Monaco
Mongolia
Montserrat
Morocco
Mozambique
Namibia
Nauru
Nepal
Netherlands
New Zealand
Nicaragua
Niger
Nigeria
Niue
Norway
Oman
Pakistan
Palau

Panama
Papua New Guinea
Paraguay
Peru
Philippines
Poland
Portugal
Qatar
Romania
Russian Federation
Rwanda
San Marino
Sao Tome and Principe
Saudi Arabia
Senegal
Seychelles
Sierra Leone
Singapore
Slovakia
Slovenia
Solomon Islands
Somalia
South Africa
Spain
Sri Lanka
St Kitts and Nevis
St Lucia
St Vincent and the Grenadines
Sudan
Suriname
Swaziland
Sweden
Switzerland
Syria
Tajikistan
Tanzania
Thailand
Togo
Tokelau
Tonga
Trinidad and Tobago
Tunisia
Turkey
Turkmenistan

Tuvalu
Uganda
Ukraine
United Arab Emirates
United Kingdom
United States of America
Uruguay
Uzbekistan
Vanuatu
Venezuela
Viet Nam
Wallis and Futuna Islands
Yemen
Yugoslavia
Zaire
Zambia
Zimbabwe

SSAPAlgorithmPackageName

Description

Name of the Algorithm Package (from AP) that this component is associated with. An SSAPComponent may only be associated with ONE AP.

Reference List

Name
SSAPComponent

SSAPAlgPackageVersion

Description

Versions of the Algorithm Package (from AP) that this SSAP Component is associated with. An SSAPComponent can be associated with multiple AP versions.

Reference List

Name
AlgorithmPackageVersions

SSAPInsertDate

Description

Data of insertion to the Data Server.

Reference List

Name
SSAPComponent

StandAloneDocumentPointer

Description

Data model logical reference to a Stand-Alone Document.

Content Source: DSS

Constraints: if guide exists, this must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
StandAloneDocument

StartDate

Description

Date of Advertisement creation.

Reference List

Name
AdvertisementMaster

StartOrbitNumber

Description

Orbit number at start of data granule.

Content Source: PGE

Constraints: StartOrbitNumber is mandatory if OrbitCalculatedSpatialDomain class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitCalculatedSpatialDomain

StateProvince

Description

The state or province of the address.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactAddress

Description

Free Text

StopOrbitNumber

Description

Orbit number at end of data granule.

Content Source: PGE

Constraints: StopOrbitNumber is mandatory if OrbitCalculatedSpatialDomain class is applicable.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
OrbitCalculatedSpatialDomain

StorageMedium

Description

The quantity and type of medium on which the distributed data are stored.

Content Source: DAAC

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
StorageMediumClass

Description

35 mm Slides

Hardcopy Plots

Magnetic Disks

Magnetic Tapes

Microfiche Slides

Microfilm Reels

Optical Disks

Online - Information required to directly obtain the collection electronically.

StreetAddress

Description

An address line for the address, used for mailing or physical addresses of organizations or individuals who serve as points of contact.

Content Source: DP; DAAC

Alias: Address

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
ContactAddress

Description

Free Text

SuggestedUsage

Description

This attribute describes how this collection or granule may be best used to support earth science/global change research.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ECSCollection

Description

Free Text

SWDateLastModified

Description

Date and time when the software was last modified.

Content Source: DP

Constraints:

Mandatory if any modification made.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
AlgorithmPackage

SWDevelopmentStandardPointer

Description

Data model logical reference to Software Development Standard document.

Content Source: DSS

Constraints:

If SW Development Standard exists then SWDevelopmentStandardPointer must exists.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SWDevelopmentStandard

SWVersion

Description

The actual version of the source code in the SSAP.

Reference List

Name
AlgorithmPackage

SystemDescriptionPointer

Description

Logical reference to the System Description document.

Content Source: DSS

Constraints:

If System Description exists then SystemDescriptionPointer exists.

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
SystemDescription

TelephoneNumber

Description

Number of org or indiv who is point of contact. The general format of the number includes country, area, and STD codes, as required for the full telephone number. Multi-extensions should be single entries rather than part of a single entry text.

Content Source: DAAC; DP

Constraints:

Phone is dependent upon TelephoneNumberType='Facsimile', 'TDD/TTY', 'Voice'

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Telephone

TelephoneNumberType

Description

The type of telephone number being provided in this instance of the phone number, in order to reach the organization or individual who serves as a point of contact. Voice number is used to speak to the org or individual, the TDD/TTY number which hearing-impaired can converse with org or indiv., or the fa(x)csimile number of the org's or indiv.

Content Source: DAAC; DP

Alias: Contact Voice Telephone

Contact TDD/TTY Telephone

Contact Facsimile Telephone

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Telephone

Description

Voice

TDD/TTY

Facsimile

TemporalKeyword

Description

This attribute specifies a word or phrase which serves to summarize the temporal characteristics referenced in the collection.

i.e. Monthly Composite, Annual Mean.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
TemporalKeywordClass

Description

Free Text

TemporalRangeType

Description

This attribute tells the system and ultimately the end user how temporal coverage is specified for the collection, granule, or event.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Temporal

Description

Periodic - Regularly occurring periods of equal time.

Point In Time - A single date and time, usually used for in-situ measurements.

Continuous Range - A single continuous range of time with a discrete start date time and stop date time.

Discontinuous Multiple Range - A span of time with irregular temporal coverage gaps, requiring the use of multiple start/stop datetime pairs to denote the complete coverage.

Multiple Point In Time - Multiple occurrences of single date and time points.

TemporalType

Description

The type of temporal characterization.

Description

Range

Single

TestPlanPointer

Description

Data model reference to document specification.

Annotation

Content Source: DSS

Alias:

Constraints:

If Test Plan exists then TestPlanPointer exists.

Described, in DID 311, as an attribute of class TestPlan.

Reference List

Name
TestPlan

TimeofDay

Description

The hour (and optionally minute, or minute and second) of the day. This attribute is used to specify a single point in time covered by a data collection, granule, or event. In the GSFC_CZCS collection this would reflect the Pass_time which is the time of the first scan of the scene.

Content Source: DP(collection);PGE(granule)

Constraints:

TimeofDay is mandatory if SingleDateTime class is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
SingleDateTime

TimeType

Description

This attribute provides the time system which the values found in temporal subclasses represent.

Content Source: DP

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
Temporal

Description

UTC - Coordinated Universal Time

UT - Universal Time

Title

Description

The full title of the document.

Content Source: DP

Constraints: mandatory for all documents

Annotation

Reference Document: 420-TP-015-001, February 1997.

Reference List

Name
Document
AdvertisementMaster

Description

Free Text

UniqueID

Description

Attribute for internal use only.

Content Source: IOS

Reference List

Name
AdvertisementMaster

UpperTitle

Description

Upper case of Title.

Content Source: IOS

Reference List

Name
AdvertisementMaster

UserCommentDocumentPointer

Description

Data model logical reference to User Comment Document.

Content Source: DSS

Constraints: User comment document must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
UserCommentDocument

UserGuideCommentPointer

Description

Used as hypertext link for the user's guide .

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
UserGuide

UserGuidePointer

Description

Logical Pointer to the UserGuide.

Annotation

311-CD-604-001, March 2001, Release 6A.03 Science Data Processing Segment (SDPS) Database Design and Database Schema Specifications for the ECS Project which are changes to provide updated details for the Data Server and CIDM subsystems.

Reference List

Name
UserGuide

ValidationDocumentPointer

Description

Data model logical reference to Validation Document.

Content Source: DSS

Constraints: Validation document must exist.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ValidationDocument

VersionDescription

Description

A brief description of the differences between this collection version and another collection version.

Source: DP

Reference List

Name
ECSCollection

VersionID

Description

Version identifier of the data collection.

Content Source: DP

Constraints:

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
CollectionDescriptionClass

VerticalSpatialDomainType

Description

This attribute describes the type of the area of vertical space covered by the locality.

Content Source: DP(collection);PGE(granule)

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
VerticalSpatialDomain

Description

Atmosphere Layer

Cloud Layer

Maximum Altitude

Maximum Depth

Minimum Altitude
Minimum Depth

VerticalSpatialDomainValue

Description

This attribute describes the extent of the area of vertical space covered by the granule. Must be accompanied by an Altitude Encoding Method description. The datatype for this attribute is the value of the attribute VerticalSpatialDomainType. The unit for this attribute is the value of either DepthDistanceUnits or AltitudeDistanceUnits.

Content Source: DP(collection);PGE(granule)

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
VerticalSpatialDomain

Description

Free Text

TOA - Top of Atmosphere

SFC - Surface of ocean or land, regardless to topography.

Cloud - Any cloud layers found.

Tropos - Troposphere. Must be accompanied by Altitude Encoding Method description. (default: 0 to 10 km)

Atmos - Troposphere + Stratosphere. Must be accompanied by Altitude Encoding Method description. (default: SFC to 30km)

Stratos - Stratosphere. Must be accompanied by Altitude Encoding Method description. (default: 10 to 30km)

Ex - Exosphere. Must be accompanied by Altitude Encoding Method description. (default: 700km)

Mid-Atmos - Upper troposphere to mesopause. Must be accompanied by Altitude Encoding Method description. (default: 10-120km)

Near_SFC - Near surface layer (within boundary layer). Must be accompanied by Altitude or Depth Encoding Method description. (default: SFC to +/- 1km)

Plume_col - Vertical extent of volcanic eruption plume. Must be accompanied by Altitude Encoding Method description for this volcanic eruption.

Plume_top - Top of volcanic eruption plume. Must be accompanied by Altitude Encoding Method Description for this volcanic eruption.

Sub_SFC - Layers immediately beneath land surface.

TOO - Top of Ocean (oceanic mixed layer)

Atmosphere Profile - Data extends vertically through atmosphere.

WestBoundingCoordinate

Description

Western-most coordinate of the limit of coverage expressed in longitude.

Content Source: DP(collection);PGE(granule)

Constraints: WestBoundingCoordinate not null for collection only.

Constraints: WestBoundingCoordinate \Rightarrow -180.0

Constraints: WestBoundingCoordinate \leq +180.0

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
BoundingBoxRectangle

ZoneIdentifier

Description

The appropriate numeric or alpha code used to identify the various zones in this grid coordinate system. See domain values of coordinate system for constraints on the zone numbers.

Content Source: DP(collection);PGE(granule)

Constraints: mandatory if grid coordinate system is used.

Annotation

Reference Document: 420-TP-015-001, February 1997

Reference List

Name
ZoneIdentifierClass

Description

Universal Transverse Mercator (UTM) - $1 \leq \text{UTM Zone Number} \leq 60$ for the Northern Hemisphere; $-60 \leq \text{UTM Zone Number} \leq -1$ for the Southern Hemisphere.

State Plane Coordinate System of 1927 - Domain values for identifier of the SPCS zone are four digit numeric codes and codes for State Plane Coordinate Systems.

State Plane Coordinate System of 1983

ARC Coordinate System - $1 \leq \text{ARC System Zone Identifier} \leq 18$

Other Grid System

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